# CHAPTER 1305 DEPARTMENT OF LABOR AND INDUSTRY ADOPTION OF INTERNATIONAL BUILDING CODE

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### 1305.0010 [Repealed, 27 SR 1474]

### 1305.0011 ADOPTION OF INTERNATIONAL BUILDING CODE BY REFERENCE AND ADMINISTRATIVE AUTHORITY.

Subpart 1. **General.** For purposes of this chapter, "IBC" means the 2006 edition of the International Building Code as promulgated by the International Code Council, Falls Church, Virginia. The IBC is incorporated by reference and made part of the Minnesota State Building Code except as qualified by the applicable provisions in chapter 1300, part 1305.0021, and as amended in this chapter. Portions of this chapter reproduce text and tables from the IBC. The IBC is not subject to frequent change and a copy of the IBC, with amendments for use in Minnesota, is available in the office of the commissioner of labor

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and industry. The IBC is copyright 2006 by the International Code Council, Inc. All rights reserved.

Subp. 2. **Mandatory chapters.** IBC Chapters 2 through 33 and 35 must be administered by any municipality that has adopted the code, except as qualified by the applicable provisions in chapter 1300, and as amended by this chapter. Amendments to IBC Chapters 11 and 30 are incorporated by reference in this rule chapter, but the actual amendments for those chapters are located in chapters 1341, the Minnesota Accessibility Code, and 1307, the Minnesota Elevator Code, respectively. Referenced documents cited in IBC Chapters 11 and 30, and chapters 1307 and 1341, apply, unless otherwise stated or deleted. For the complete application and mandatory requirements relating to IBC Chapter 1341. For the complete application and mandatory requirements relating to IBC Chapter 30, see chapter 1307.

Subp. 3. **Replacement chapters.** The following IBC chapters are deleted and replaced with the Minnesota Rules chapters listed in items A and B.

A. IBC Chapter 1 and any references to code administration are deleted and replaced with chapter 1300, Minnesota Administration Code.

B. IBC Chapter 34 and any references to conservation or rehabilitation of existing buildings are deleted and replaced with chapter 1311, Minnesota Building Conservation Code.

Subp. 4. Seismic or earthquake provisions. Any seismic or earthquake provisions of the IBC and any references to them are deleted and are not included in this code.

Subp. 5. **Flood hazard or floodproofing provisions.** Any flood hazard or floodproofing provisions in the IBC, and any reference to those provisions, are deleted in their entirety. Requirements for floodproofing are located in chapter 1335, Floodproofing Regulations.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.0020 [Repealed, 27 SR 1474]

### 1305.0021 REFERENCES TO OTHER INTERNATIONAL CODE COUNCIL CODES.

Subpart 1. General. References to other codes and standards promulgated by the International Code Council in the IBC are modified in subparts 2 to 12.

Subp. 2. **Building code.** References to the IBC in this code mean the Minnesota Building Code, adopted pursuant to this chapter and Minnesota Statutes, section 326B.106, subdivision 1.

Subp. 3. **Residential code.** References to the International Residential Code in this code mean the Minnesota Residential Code, adopted pursuant to chapter 1309 and Minnesota Statutes, section 326B.106, subdivision 1.

Subp. 4. **Electrical code.** References to the International Code Council Electrical Code in this code mean the Minnesota Electrical Code, adopted pursuant to chapter 1315 and Minnesota Statutes, section 326B.35.

Subp. 5. **Fuel gas code.** References to the International Fuel Gas Code in this code mean the Minnesota Mechanical Code, adopted pursuant to chapter 1346 and Minnesota Statutes, section 326B.106, subdivision 1.

Subp. 6. **Mechanical code.** References to the International Mechanical Code in this code mean the Minnesota Mechanical Code, adopted pursuant to chapter 1346 and Minnesota Statutes, section 326B.106, subdivision 1.

Subp. 7. **Plumbing code.** References to the International Plumbing Code in this code mean the Minnesota Plumbing Code, adopted pursuant to chapter 4715 and Minnesota Statutes, section 326B.106, subdivisions 1 and 2.

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Subp. 8. **Private sewage disposal code.** References to the International Private Sewage Disposal Code in this code mean the Minnesota Pollution Control Agency's minimum standards and criteria for individual sewage treatment systems adopted pursuant to chapter 7080 and Minnesota Statutes, chapters 103F, 103G, 115, and 116.

Subp. 9. Energy conservation code. References to the International Energy Conservation Code in this code mean the Minnesota Energy Code, adopted pursuant to Minnesota Statutes, section 326B.115.

Subp. 10. **Property maintenance code.** References to the International Property Maintenance Code in this code do not apply.

Subp. 11. **Fire code.** References to the International Fire Code in this code mean the Minnesota State Fire Code, adopted pursuant to chapter 7511 and Minnesota Statutes, chapter 299F.

Subp. 12. International Existing Building Code. References to the International Existing Building Code in this code mean Minnesota State Building Conservation Code, adopted pursuant to chapter 1311 and Minnesota Statutes, section 326B.106, subdivision 1.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

**History:** 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 5 s 32; art 13 s 4; L 2008 c 337 s 64

### 1305.0030 ADMINISTRATIVE PROCEDURE CRITERIA.

Procedures relating to the administration and enforcement of this code under Minnesota Statutes, section 16B.57, are contained in chapter 1300, Minnesota Administration Code, which governs the application of this code.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

## 1305.0040 VIOLATION.

A violation of this code is a misdemeanor under Minnesota Statutes, section 326B.082. Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* History: *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

**1305.0100** [Repealed, 19 SR 1340]

### 1305.0101 CHAPTER 1, ADMINISTRATION.

IBC Chapter 1 is deleted and replaced with the following:

## CHAPTER 1

## ADMINISTRATION

This code shall be administered in accordance with Minnesota Rules, chapter 1300.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

**1305.0102** [Repealed, 27 SR 1474]

1305.0103 [Repealed, 27 SR 1474]

1305.0105 [Repealed, 27 SR 1474]

1305.0106 [Repealed, 27 SR 1474]

1305.0107 [Repealed, 27 SR 1474]

1305.0108 [Repealed, 27 SR 1474]

1305.0109 [Repealed, 27 SR 1474]

1305.0150 [Repealed, 19 SR 1340]

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1305.0200 [Repealed, 19 SR 1340]

### 1305.0201 SECTION 201, GENERAL.

IBC Section 201.4 is amended to read as follows:

**201.4 Terms not defined.** Where terms are not defined through the methods authorized by this chapter, the Merriam-Webster Collegiate Dictionary, available at www.m-w.com, shall be considered as providing ordinarily accepted meanings. The dictionary is incorporated by reference, is subject to frequent change, and is available through the Minitex interlibrary loan system.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

#### 1305.0202 SECTION 202, DEFINITIONS.

Subpart 1. **Agricultural building.** The definition of "agricultural building" in IBC Section 202 is amended as follows:

**AGRICULTURAL BUILDING.** Pursuant to Minnesota Statutes, section 326B.103, an agricultural building means a structure on agricultural land as defined in Minnesota Statutes, section 273.13, subdivision 23, that is designed, constructed, and used to house farm implements, livestock, or agricultural produce or products used by the owner, lessee, and sublessee of the building and members of their immediate families, their employees, and persons engaged in the pickup or delivery of agricultural products.

Subp. 2. **Townhouse.** The definition of "townhouse" in IBC Section 202 is deleted in its entirety.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.0300** [Repealed, 15 SR 74]

1305.0301 [Repealed, 27 SR 1474]

1305.0302 [Repealed, 32 SR 7]

1305.0305 [Repealed, 27 SR 1474]

1305.0308 [Repealed, 27 SR 1474]

### 1305.0308 INSTITUTIONAL GROUP I.

Subpart 1. Section 308.2. IBC Section 308.2 is amended to read as follows:

**308.2 Group I-1.** This occupancy shall include buildings, structures, or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability, or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

residential board and care facilities

assisted living facilities

halfway houses

group homes

congregate care facilities

social rehabilitation facilities

alcohol and drug centers

convalescent facilities

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A facility such as the above with five or fewer persons shall be classified as Group R-3. A facility such as above housing at least six and not more than 16 persons, shall be classified as Group R-4.

Subp. 2. Section 308.3. IBC Section 308.3 is amended to read as follows:

**308.3 Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, or custodial care on a 24-hour basis for more than five persons who are not capable of self-preservation. This group shall include, but not be limited to, the following:

hospitals

nursing homes, both intermediate-care facilities and skilled nursing facilities

mental hospitals

detoxification facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3.

Subp. 3. Section 308.5. IBC Section 308.5 is amended to read as follows:

**308.5 Group I-4, day care facilities.** This group shall include buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with five or fewer persons shall be classified as Group R-3. Places of worship during religious functions are not included.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.0310 SECTION 310 RESIDENTIAL GROUP R.

IBC Section 310.1 is amended to read as follows:

**310.1 Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I. Residential occupancies shall include the following:

R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

boarding houses (transient)

hotels (transient)

motels (transient)

bed and breakfast facilities with six or more guest rooms. A facility with less than six guest rooms shall be classified as a Group R-3 occupancy.

R-2 Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

apartment houses

boarding houses (not transient)

convents

dormitories

fraternities and sororities

hotels (nontransient)

monasteries

motels (nontransient)

vacation timeshare properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with construction that complies with the requirements for Group R-3.

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R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4, or I including:

buildings that do not contain more than two dwelling units

adult facilities that provide accommodations for five or fewer persons of any age for less than 24 hours

child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours

congregate living facilities with 16 or fewer persons

adult and child care facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in this code.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

**History:** 20 SR 2290(NO. 43); 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.0400 [Repealed, 19 SR 1340]

#### 1305.0402 SECTION 402, COVERED MALL BUILDINGS.

Subpart 1. Section 402.7. IBC Section 402.7 is amended by adding a subsection to read as follows:

**402.7.4 Property lines.** Property lines may be platted between an anchor building and a covered mall building separated in accordance with Section 402.7.3 without requiring the construction of a party wall if there are legal agreements recorded with the deed for each of the separate properties. These recorded agreements shall require that buildings as divided by property lines be in conformance with the applicable provisions of the State Building Code, as if the buildings were a single building on a single piece of property. In addition, the agreement must state that no individual building or property owner may modify any portion of the building in any way that would not comply with the State Building Code.

Subp. 2. [Repealed, 32 SR 7]

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.0403 SECTION 403, HIGH-RISE BUILDINGS.

Subpart 1. IBC Section 403.3.2. IBC Section 403.3.2 is deleted in its entirety.

Subp. 2. **IBC Section 403.** IBC Section 403 is amended by adding a section to read as follows:

**403.15 Post-fire smoke exhaust system.** A post-fire smoke exhaust system in compliance with IBC Section 913 shall be provided for high-rise buildings.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.0404 SECTION 404, ATRIUMS.

IBC Section 404.4 is amended to read as follows:

**404.4 Smoke control.** A smoke-control system shall be installed in accordance with Section 909.

**Exception:** Smoke control is not required for atriums that connect only two stories. Covered mall buildings shall be provided with a post-fire smoke exhaust system in compliance with Section 913.

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

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1305.0405 [Repealed, 27 SR 1474]

#### 1305.0406 SECTION 406, MOTOR VEHICLE-RELATED OCCUPANCIES.

IBC Section 406.3.8 is amended to read as follows:

**406.3.8 Means of egress.** Where persons other than parking attendants are permitted, open parking garages shall meet the means of egress requirements of Chapter 10. Where no persons other than parking attendants are permitted, there shall not be less than two 36-inch wide (914 mm) exit stairways.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.0407 SECTION 407, GROUP I-2.

IBC Section 407.2.1 is amended to read as follows:

**407.2.1 Spaces of unlimited area.** In an I-2 occupancy, spaces constructed as required for corridors shall be permitted to be open to a corridor, only where all the following criteria are met:

1. The spaces are not occupied for patient sleeping rooms, treatment rooms, hazardous or incidental use areas as defined in Section 508.2.

2. The open space is protected by an automatic fire detection system installed in accordance with Section 907.

3. The corridors onto which the spaces open, in the same smoke compartment, are protected by an automatic fire detection system installed in accordance with Section 907, or the smoke compartment in which the spaces are located is equipped throughout with quick response sprinklers in accordance with Section 903.3.2.

4. The space is arranged so as not to obstruct access to the required exits.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.0408 SECTION 408, GROUP I-3.

Subpart 1. Section 408.6. IBC Section 408.6 is amended to read as follows:

**408.6 Smoke barrier.** Occupancies in Group I-3 shall have smoke barriers complying with Section 709 to divide every story occupied by residents for sleeping, or any other story having an occupant load of more than five persons, into at least two smoke compartments.

**Exception:** Spaces having direct exit to one of the following, provided that the locking arrangement of the doors involved complies with the requirements for doors at the smoke barrier for the use condition involved.

1. A public way.

2. A building separated from the resident housing area by a 2-hour fire-resistancerated assembly or 50 feet (15,240 mm) of open space.

3. A secured yard or court having a holding space 50 feet (15,240 mm) from the housing area that provides 6 square feet ( $0.56 \text{ m}^2$ ) or more of refuge area per occupant including residents, staff and visitors.

Subp. 2. Section 408.9. IBC Section 408 is amended by adding a subsection as follows:

#### 408.9 Glazing.

**408.9.1 Corridors.** In restraint areas of fully sprinklered detention and correction facilities, the area of glazing in one-hour corridor walls is not restricted if one of the following conditions is met:

1. All glazing is approved 1/4-inch thick (6.4 mm) wired glass, has approved 1/4-inch thick (6.4 mm) wired glass in a security glazing assembly, or other approved fire-tested glazing material set in steel frames; or

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2. Laminated security glazing may be used if the glass is protected on both sides by a sprinkler system equipped with listed quick-response sprinkler heads. The sprinkler system shall be designed to wet the surface of the glass wall when actuated.

**408.9.2 Other.** When necessary to maintain direct visual supervision by facility staff, laminated security glazing may be used in fire-resistive wall and door assemblies, up to a two-hour fire protection rating, if all of the following conditions are met:

1. The fire-resistive wall or door assembly is not part of a required fire wall. For vertical exit enclosure, refer to Section 408.3.6;

2. The glazing is protected on both sides by a sprinkler system equipped with listed quick-response sprinklers. The sprinkler system shall completely wet the entire surface of the glass wall when actuated;

3. The area of the glazing does not exceed 25 percent of the common wall of the area requiring supervision; and

4. The area of glazing in fire-resistive door assemblies is limited to 1,296 square inches  $(0.836 \text{ m}^2)$  per light.

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* 

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.0414 SECTION 414, HAZARDOUS MATERIALS.

Subpart 1. Section 414.2.4. IBC Section 414.2.4 is amended to read as follows:

**414.2.4 Fire-resistance-rating requirements.** The required fire-resistance rating for fire barrier assemblies shall be in accordance with Table 414.2.2.

Subp. 2. Section 414.2.6. IBC Section 414.2 is amended by adding a subsection to read as follows:

**414.2.6 Hazardous materials above the third floor in laboratories in Group B, E, and I-2 occupancies.** Control areas containing laboratories located above the third floor in Group B, E, or I-2 occupancies may be exempt from the provisions in Sections 414.2.1 through 414.2.4 if all of the following conditions are met:

1. Buildings containing the laboratories are equipped throughout with automatic sprinkler protection installed in accordance with Section 903.3.1.1;

2. Control areas containing laboratories located above the third floor are separated from each other and other portions of the building by a fire barrier having a fire-resistance rating of not less than two hours;

3. The maximum amount of hazardous materials in storage and in use in control areas containing laboratories does not exceed ten percent of the maximum allowable quantities listed in Tables 307.1(1) and 307.1(2) with all increases allowed in the footnotes of those tables; and

4. The maximum number of control areas containing laboratories shall not exceed 5 per floor.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.0419** [Repealed, 32 SR 7]

## 1305.0421 SECTION 421, GROUP E OCCUPANCIES.

IBC Chapter 4 is amended by adding a section and subsections to read as follows:

SECTION 421

### GROUP E OCCUPANCIES

**421.1 Applicability.** This section applies to Group E school buildings containing uses described in this section. School buildings shall comply with this section and all other

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applicable provisions of this code, as intended by Minnesota Statutes, section 123B.51, subdivision 7.

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**421.2 Use of school buildings by lower grades.** In addition to the occupancy and construction requirements in this code, this section applies to those special uses and occupancies described in this section.

**421.2.1 School buildings equipped with complete automatic fire sprinkler and fire alarm systems.** Rooms used by preschool, kindergarten, and first and second grade students for classrooms, latchkey, day care, early childhood family education, teen parent, or similar programs may be located on any floor level below the fourth story if the following conditions exist:

1. The building is protected throughout with an approved automatic fire sprinkler system; and

2. The building is protected throughout with an approved automatic fire alarm system having automatic smoke detection devices installed throughout the exit system within every room or area used for purposes other than a classroom or office.

**421.2.2** School buildings equipped with either a complete automatic fire sprinkler system or a fire alarm system. Rooms shall be located on the story of exit discharge when used for the purposes of classroom, latchkey, day care, early childhood education, teen parent, or similar programs by preschool, kindergarten, or first grade students. Rooms shall be located on the story of exit discharge or one story above when used for any purpose by second grade students.

Rooms occupied by preschool, kindergarten, first, or second grade students, when used for the programs described in this section, may be located on floor levels other than those designated above if one of the following conditions is met:

1. An approved automatic fire sprinkler system is provided throughout the building and the use of the affected room or space is limited to one grade level at a time and exiting is provided from the room or space which is independent from the exiting system used by older students; or

2. A complete approved automatic fire alarm system is installed throughout the building consisting of automatic smoke detection installed throughout the exit system and within all rooms and areas other than classroom and office areas, and the use of the affected room or space is limited to one grade level at a time, and exiting is provided from the room or space which is independent from the exiting system used by older students.

For the purposes of this subpart, pupils from the second grade down are considered one grade level.

**421.2.3** Accessory spaces. Accessory spaces, including spaces used for gymnasiums, cafeterias, media centers, auditoriums, libraries, and band and choir rooms, used on an occasional basis by preschool, kindergarten, first, and second grade students are permitted to be located one level above or one level below the story of exit discharge, if the building is protected throughout by an approved automatic sprinkler system or a complete approved corridor smoke detection system.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.0500** [Repealed, 19 SR 1340]

### 1305.0501 SECTION 501, GENERAL.

IBC Section 501.1 is amended to read as follows:

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**501.1 Scope.** The provisions of this chapter control the height and area of structures hereafter erected and additions to existing structures. An existing building plus additions shall comply with the height and area provisions of this chapter.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

#### 1305.0507 SECTION 507, UNLIMITED AREA BUILDINGS.

Subpart 1. IBC Section 507.2. IBC Section 507.2 is amended to read as follows:

**507.2** Nonsprinklered, one-story. The area of a one-story building of Group F-2 or S-2 occupancy shall not be limited when the building is surrounded and adjoined by public ways or yards not less than 60 feet (18,288 mm) in width.

Subp. 2. **IBC Section 507.3.** The exceptions listed in IBC Section 507.3 are not amended. The first sentence of IBC Section 507.3 is amended to read as follows:

**507.3 Sprinklered, one-story.** The area of a one-story building of Group B, F, M, or S occupancy or a one-story Group A-4 building, of other than Type V construction, shall not be limited when the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18,288 mm) in width.

Subp. 3. IBC Section 507.4. IBC Section 507.4 is amended to read as follows:

**507.4 Two story.** The area of a two-story building of Group B, F, M, or S occupancy shall not be limited when the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, and is surrounded and adjoined by public ways or yards not less than 60 feet (18,288 mm) in width.

Subp. 4. **IBC Section 507.5.** IBC Section 507.5 is amended by adding a subsection to read as follows:

**507.5.1 Property lines.** Portions of an unlimited area building may be divided by platted property lines without requiring the construction of party walls if the whole building has:

1. Permanent open space on all sides as required by Section 507.2, 507.3, 507.4, or 507.5; and

2. Proper legal agreements recorded with the deed for each of the separate properties. These recorded agreements shall require that the buildings as divided by property lines, be in conformance with the applicable provisions of the Minnesota State Building Code, as if the buildings were a single building on a single piece of property. In addition, the agreement must state that no individual building or property owner may modify any portion of the building in any way that would not be in compliance with the Minnesota State Building Code.

**Statutory Authority:** MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

## 1305.0508 MIXED USE AND OCCUPANCY.

IBC Section 508.3.3.4 is amended by adding an exception as follows:

**Exception:** An occupancy separation need not be provided between a child or adult day care use and a Group A-3 church building.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.0509 SECTION 509, SPECIAL PROVISIONS.

IBC Section 509.2, item 4, exception 2, is amended to read as follows:

2. Multiple Group A uses, each with an occupant load of less than 300, or Group B, M, or R uses shall be permitted, in addition to those

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uses incidental to the operation of the building, including storage areas, provided that the entire structure below the horizontal assembly is protected throughout by an approved automatic sprinkler system.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.0600** [Repealed, 19 SR 1340]

1305.0700 [Repealed, 19 SR 1340]

**1305.0704** [Repealed, 32 SR 7]

1305.0707 [Repealed, 32 SR 7]

1305.0714 [Repealed, 32 SR 7]

### 1305.0716 SECTION 716, DUCTS AND AIR TRANSFER OPENINGS.

IBC Section 716.5.3 is amended by adding exception 5 as follows:

5. Fire dampers, smoke dampers, and combination fire/smoke dampers are not required in laboratory hood exhaust duct penetrations of shaft enclosures where laboratory ventilation systems are installed in accordance with NFPA 45.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.0800 [Repealed, 19 SR 1340]

1305.0900 [Repealed, 19 SR 1340]

### 1305.0901 SECTION 901, GENERAL

IBC Section 901.6.2 is amended by deleting the section in its entirety.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

## 1305.0903 [F] SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.

Subpart 1. Scope. IBC [F] Section 903 is amended as follows.

Subpart 1. [Repealed, 32 SR 7]

Subp. 1a. [F] Section 903.2.7. IBC [F] Section 903.2.7 is amended to read as follows:

**903.2.7 Group R.** An automatic sprinkler system installed in accordance with Section 903.3.1 shall be provided throughout all buildings containing a Group R occupancy where one of the following conditions exists:

1. The combined area on all floors, including mezzanines, exceeds 9,250 square feet (859.3  $m^2); \ or$ 

2. The Group R fire area is located more than three stories above grade plane.

### **Exceptions:**

1. Group R-3 single dwelling unit buildings.

2. Group R-3 or R-4 occupancies containing a facility licensed by the state of Minnesota shall be provided with a fire suppression system as required by the applicable licensing provision or this section, whichever is more restrictive.

3. Attached garages need not be sprinklered throughout if a dry sprinkler is installed within 5 feet (1524 mm) of the door opening between the garage and attached residence.

For the purposes of this section, fire walls, party walls, or attached multiple fire-resistive exterior walls shall not constitute separate buildings.

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**Exception:** Fire walls, party walls, or attached multiple fire-resistive exterior walls separating other occupancies not accessory to the Group R.

Subp. 1b. [F] Section 903.2.12.1. IBC [F] Section 903.2.12.1 is amended to read:

**903.2.12.1 Fire protection for exhaust systems.** Any portion of an exhaust system utilizing combustible components or having the potential for combustible residue build-up on the inside or where required by other sections of this code, where the duct cross-sectional area is greater than or equal to 75 square inches (480 cm<sup>2</sup>), shall be provided with an automatic extinguishing system within the duct and at the duct intake, hood, enclosure, or canopy, or shall be constructed of material listed for use without sprinkler protection. When sprinkler protection is installed, means shall be provided to prevent water accumulation in the duct or the flow of water back to a process where the application of water constitutes a serious life or fire hazard.

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. [Repealed, 32 SR 7]

Subp. 3a. **[F] Section 903.3.1.2.1.** IBC [F] Section 903.3.1.2.1 is amended to read as follows:

**903.3.1.2.1 Protection of decks and balconies.** Decks and balconies greater than 6 feet (1.8 m) above grade, greater than 4 feet (1.2 m) deep, and with an area greater than 40 square feet  $(3.72 \text{ m}^2)$  attached to new Group R-1 and R-2 occupancy buildings protected in accordance with Section 903.3.1.2 that are three or more stories in height and with 30 or more units shall be protected with sprinklers under the balcony or deck framing and under attic eaves when both of the following two conditions exist:

1. The building has an unsprinklered attic; and

2. The building has combustible siding.

Subp. 4. **[F] Section 903.3.1.** IBC [F] Section 903.3.1 is amended by adding a section to read as follows:

**903.3.1.4 Buildings of undetermined use.** When fire sprinkler systems are required in buildings of undetermined use, they shall be designed and installed to have a sprinkler density of not less than that required for an Ordinary Hazard Group 2 use with a minimum design area of 3,000 square feet (279 m<sup>2</sup>).

Use is considered undetermined if not specified at the time a permit is issued.

Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner to upgrade the system to the required density for the new hazard, use or occupancy.

Subp. 5. **[F] Section 903.3.1.** IBC [F] Section 903.3.1 is amended by adding a subsection to read as follows:

**903.3.1.5 Special sprinkler design criteria.** When fire sprinkler systems are required in areas containing the following uses, they shall be designed and installed to have a sprinkler density of not less than that required for an Ordinary Hazard Group 2 use:

1. Chemistry labs; or

2. Wrestling rooms or gymnastic rooms.

Subp. 5a. **[F] Section 903.3.1.** IBC **[**F**]** Section 903.3.1 is amended by adding a subsection to read as follows:

**903.3.1.6 Modifications to sprinkler standards.** The sprinkler installation standards as referenced in Sections 903.3.1.1, 903.3.1.2, and 903.3.1.3 are modified as follows:

**903.3.1.6.1 Hose stream requirements.** When, in the opinion of the fire chief, an adequate alternate water supply for hose stream requirements is provided or available, the water supply requirements for the sprinkler system hose stream demands may be modified.

**903.3.1.6.2 Elevator shafts and equipment.** Sprinkler protection shall not be installed in elevator shafts, elevator pits, or elevator machine rooms.

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**903.3.1.6.3 Swimming pools.** Sprinkler protection need not be provided on the ceiling of rooms containing swimming pools when the pool area is used exclusively for swimming purposes and when sprinklers are provided around the perimeter of the pool area.

**903.3.1.6.4 NFPA 13 modifications.** Sections 8.6.4.1.4.2, 8.6.4.1.4.3, 8.14.8.2, and 8.16.2.5 of NFPA 13 are revised to read:

**8.6.4.1.4.2 Combustible spaces; installation near peak.** Sprinklers under a roof or ceiling in combustible concealed spaces of wood joist or wood truss construction with members 3 feet (0.9 m) or less on center and a slope having a pitch of four in 12 or greater shall be installed so that a row of sprinklers is installed within 12 inches (305 mm) horizontally of the peak and 1-12 inches (25.4-305 mm) down from the bottom of the top chord member.

**8.6.4.1.4.3 Combustible spaces; installation along eave.** Sprinklers under a roof or ceiling in combustible concealed spaces of wood joist or wood truss construction with members 3 feet (0.9 m) or less on center and a slope having a pitch of four in 12 or greater shall be installed so that the sprinklers installed along the eave are located not less than 5 feet (1.5 m) from the intersection of the truss cords.

**8.14.8.2 Linen closets and pantries.** Sprinklers are not required in linen closets and pantries within dwelling units that meet the following conditions:

1. The area of the space does not exceed 12 square feet  $(1.1 \text{ m}^2)$ .

2. The least dimension does not exceed 3 feet (0.9 m).

3. The walls and materials are surfaced with noncombustible or limited combustible materials.

4. The closet or pantry contains no mechanical equipment, electrical equipment, or electrical appliances.

### 8.16.2.5 Valves.

**8.16.2.5.1 Fire department connection.** A listed check valve shall be installed in each fire department connection.

**8.16.2.5.1.1 Maximum pipe length.** There shall be a maximum of 25 feet (7.6 m) of pipe between the check valve and the fire department connection inlet.

**Exception:** This maximum shall not apply to the check valve serving a free-standing fire department connection.

**8.16.2.5.1.2 Check valve location.** The check valve shall be located to minimize freezing potential.

Subp. 6. [Repealed, 32 SR 7]

Subp. 6a. **[F] Section 903.3.7.** IBC [F] Section 903.3 is amended by adding a subsection to read as follows:

**903.3.7 Sprinkler system design pressure safety margin.** For new sprinkler systems or additions to existing sprinkler systems, the available water supply shall exceed the sprinkler system demand, including hose stream requirements, by 5 psi (0.34 bars) or more.

Subp. 7. **[F] Section 903.4.** IBC [F] Section 903.4 is amended by adding an exception to read as follows:

8. For existing sprinkler systems, monitoring is required when the number of sprinklers is 100 or more.

Subp. 8. **[F] Section 903.4.** IBC [F] Section 903.4 is amended by adding a section to read as follows:

**903.4.4 Valve security.** All valves controlling water supplies for automatic sprinklers shall be locked or secured in the open position.

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**Exception:** Valves located in a room or space when access is limited to essential personnel only.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.0904 [Repealed, 27 SR 1474]

### 1305.0905 [F] SECTION 905, STANDPIPE SYSTEMS.

Subpart 1. **[F] Section 905.2.** IBC **[**F**]** Section 905.2 is amended by adding a subsection to read as follows:

**905.2.1 Modification to standards.** In buildings other than high rise that are protected throughout by an automatic sprinkler system installed in accordance with Sections 903.3.1.1 and 903.3.1.2, a Class I or III standpipe system need only meet the pressure requirements for the sprinkler system when such systems comply with Sections 905.2.1.1 through 905.2.1.5:

**905.2.1.1 Municipal water supply.** A municipal water supply capable of supplying the required standpipe flow rate with a residual pressure not less than 20 psi (1.4 bars) through a fire hydrant shall be provided. A fire hydrant shall be located within 300 feet (91 m) of the building's fire department connection.

**905.2.1.2 System testing and pipe size.** The standpipe system shall be able to provide the pressure and flow rate required by NFPA 14 when the standpipe system is supported by local fire department apparatus through the fire department connection as verified with hydraulic calculations. The hydraulic calculations are to be performed between the hydraulically most demanding standpipe hose connection and the fire department connection. Pipe sizes shall not be less than the minimum requirements in NFPA 14.

**905.2.1.3 Design pressure.** A maximum design pressure of 150 psi (10.3 bars) is permitted at the fire department connection when the standpipe is supported by local fire department apparatus.

**905.2.1.4 Hose connection.** At least one 2-1/2 inch (64 mm) hose connection shall be provided on the exterior of the building at the fire department connection for each 250 gpm (980 L/min) of required standpipe flow.

**905.2.1.5** Automatic sprinkler system demand. The automatic sprinkler system demand, including the inside hose stream demand from NFPA 13, is to be provided by the municipal water supply system without requiring fire department pumping into the system.

Subp. 2. **[F] Section 905.3.2.** IBC **[**F**]** Section 905.3.2 is amended by adding a section to read as follows:

**905.3.2.1 Group A exhibition.** Class III automatic standpipes shall be provided in Group A-3 Occupancies where the floor area used for exhibition exceeds 12,000 square feet (1115  $m^2$ ).

Subp. 3. **[F] Section 905.3.4.** IBC [F] Sections 905.3.4 and 905.3.4.1 are amended by deleting the sections in their entirety.

Subp. 4. [Repealed, 32 SR 7]

Subp. 5. [Repealed, 32 SR 7]

Subp. 6. **[F] Section 905.3.8.** IBC [F] Section 905.3 is amended by adding a subsection to read as follows:

**905.3.8 Detention and correctional facilities.** Regardless of the height of the building or number of stories, every building in a Group I-3 detention and correctional facility, where 50 or more persons are under restraint or security under Occupancy Condition 3, 4 or 5, shall be provided with a Class III automatic wet or semiautomatic dry standpipe system.

**Exception:** Combined systems meeting the provisions of Section 905.2 may be used.

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When acceptable to the fire chief, fire department connections may be located inside all security walls or fences on the property.

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Standpipes shall be located in accordance with Section 905. In addition, standpipes shall be located so that it will not be necessary to extend hose lines through smoke barriers. When located in cell complexes, standpipes may be located in secured pipe chases.

Subp. 6a. **[F] Section 905.3.9.** IBC [F] Section 905.3 is amended by adding a subsection to read as follows:

**905.3.9 Group R-2 occupancies.** Class III wet standpipes shall be installed in Group R-2 occupancies three or more stories in height where any portion of the building's interior area is more than 200 feet (60,960 mm) of travel, vertically or horizontally, from the nearest point of fire department vehicle access. Standpipes required by this section shall be installed in enclosed stairways.

Subp. 7. [F] Section 905.5.1. IBC [F] Section 905.5.1 is deleted.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.0907 [F] SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.

Subpart 1. **[F] Section 907.1.3.** IBC [F] Section 907.1 is amended by adding a subsection to read as follows:

**907.1.3 Protection of control units.** In areas that are not continuously occupied, automatic fire detection shall be provided at the location of each new fire alarm control unit, fire alarm notification circuit power extender, and supervising station transmitting equipment to provide notification of fire at that location.

**Exception:** Additional detection is not required in buildings sprinklered in accordance with Section 903.3.1.1 or 903.3.1.2.

Subp. 1a. [F] Section 907.2. IBC [F] Section 907.2 is amended to read as follows:

**907.2** Where required in new buildings and occupancies. An approved manual, automatic, or manual and automatic fire alarm system shall be provided in new buildings and occupancies in accordance with Sections 907.2.1 through 907.2.24 and NFPA 72. For the purposes of Sections 907.2.1 through 907.2.24, fire barrier walls or fire walls shall not define separate buildings. In buildings containing mixed occupancies that are designed as separated uses in accordance with Section 508.3.3, fire alarm and detection systems need only be installed in those occupancies where required by this section.

**Exception:** In areas protected by an approved, supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, automatic fire detectors required by Section 907.2 need not be provided. Where Section 907.2 requires smoke detectors, such protection shall be installed.

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. **[F] Section 907.2.1.1.** IBC **[F]** Section 907.2.1.1 is amended to read as follows:

**907.2.1.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be installed in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, kitchens, trash collection rooms, storage rooms, and similar areas.

Subp. 4. **[F] Section 907.2.1.2.** IBC **[F]** Section 907.2.1.2 is amended to read as follows:

**907.2.1.2 Notification.** The required fire alarm system shall activate an audible and visible notification appliance at a constantly attended location within the building for the purposes of initiating emergency action. A presignal feature and positive alarm sequencing in accordance with NFPA 72 are permitted.

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Occupant notification shall be by means of voice announcements, either live or prerecorded, initiated by the person in the constantly attended location.

**Exception:** Where no constantly attended location exists, an automatic fire alarm system providing a general evacuation signal or an approved emergency voice/alarm communications system is permitted.

Subp. 5. **[F] Section 907.2.1.** IBC [F] Section 907.2.1 is amended by adding a section to read as follows:

**907.2.1.3 System initiation in Group A occupancies with an occupant load of 1,000 or more.** Activation of the fire alarm system in Group A occupancies with an occupant load of 1,000 or more shall immediately initiate an approved prerecorded message announcement using an approved emergency voice/alarm communications system in accordance with NFPA 72.

**Exception:** Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an approved constantly attended location.

Subp. 6. [F] Section 907.2.2. IBC [F] Section 907.2.2 is amended to read as follows:

**907.2.2 Group B, general.** A fire alarm system shall be installed in accordance with Sections 907.2.2 through 907.2.2.3 in Group B occupancies where:

1. The building has an occupant load of 500 or more persons; or

2. The building has an occupant load of more than 100 persons above or below the lowest level of exit discharge; or

3. The building contains an outpatient clinic.

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When automatic sprinkler systems or automatic fire detectors are installed in outpatient clinics, such systems or detectors shall be connected to the building fire alarm system.

**Exception:** In other than outpatient clinics, a fire alarm system is not required when an approved automatic fire extinguishing system is installed throughout the building.

Subp. 7. **[F] Section 907.2.2.** IBC [F] Section 907.2.2 is amended by adding a section to read as follows:

**907.2.2.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, shops, kitchens, mechanical and electrical rooms, trash collection rooms, storage rooms and similar areas. In outpatient clinics, initiation of the fire alarm system shall also be by manual means.

Subp. 8. **[F] Section 907.2.2.** IBC [F] Section 907.2.2 is amended by adding a section to read as follows:

**907.2.2.2 Notification.** Activation of the fire alarm system shall initiate a general evacuation signal.

**Exception:** In lieu of audible notification appliances, visible notification appliances shall be permitted to be used in patient care areas.

Subp. 9. **[F] Section 907.2.2.** IBC [F] Section 907.2.2 is amended by adding a section to read as follows:

**907.2.2.3 Outpatient clinics.** Corridors in outpatient clinics and spaces open to the corridors shall be protected by an automatic smoke detection system.

Subp. 10. [F] Section 907.2.3. IBC [F] Section 907.2.3 is amended to read as follows:

**907.2.3 Group E, general.** A fire alarm system shall be installed in accordance with Sections 907.2.3 through 907.2.3.3 in Group E occupancies having an occupant load of 50 or more.

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Subp. 11. **[F] Section 907.2.3.** IBC [F] Section 907.2.3 is amended by adding a section to read as follows:

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**907.2.3.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitors' closets, trash collection rooms, storage rooms, lounges and similar areas.

## **Exceptions:**

1. In buildings protected throughout by an approved, supervised fire sprinkler system, manual fire alarm boxes are only required in the main office and in a custodial area.

2. Where all corridors are protected by an approved automatic fire alarm system having smoke detection with alarm verification, manual fire alarm boxes are only required near exits serving shops, chemistry and physics laboratories, boiler rooms, industrial technology and industrial arts rooms, kitchens, custodian's offices, and main offices.

Subp. 12. [F] Section 907.2.3. IBC [F] Section 907.2.3 is amended by adding a subsection to read as follows:

**907.2.3.2 Travel through adjoining rooms.** Where the only means of egress travel from an interior room or rooms having an aggregate occupant load of more than 10 occupants is through an adjoining or intervening room, automatic smoke detectors shall be installed throughout the common atmosphere through which the path of egress travel passes.

**Exception:** In buildings that are protected throughout by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, smoke detectors are not required in intervening or adjoining rooms.

Subp. 13. **[F] Section 907.2.3.** IBC [F] Section 907.2.3 is amended by adding a section to read as follows:

**907.2.3.3** Notification. Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

Subp. 14. [F] Section 907.2.4. IBC [F] Section 907.2.4 is amended to read as follows:

**907.2.4 Group F, general.** A fire alarm system shall be installed in accordance with Sections 907.2.4 through 907.2.4.2 in Group F occupancies that are two or more stories in height and have an occupant load of 500 or more above or below the lowest level of exit discharge.

**Exception:** A fire alarm system is not required when an approved automatic fire extinguishing system is installed throughout the building.

Subp. 15. **[F] Section 907.2.4.** IBC [F] Section 907.2.4 is amended by adding a section to read as follows:

**907.2.4.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, trash collection rooms, kitchens, mechanical and electrical rooms, and similar areas.

Subp. 16. **[F] Section 907.2.4.** IBC [F] Section 907.2.4 is amended by adding a section to read as follows:

**907.2.4.2 Notification.** Activation of the fire alarm system shall initiate a general evacuation signal.

Subp. 17. [F] Section 907.2.5. IBC [F] Section 907.2.5 is amended to read as follows:

**907.2.5 Group H, general.** A fire alarm system shall be installed in accordance with Sections 907.2.5 through 907.2.5.2 in Group H-5 occupancies, occupancies used for the manufacture of organic coatings, and, when required by Chapters 37, 39 and 40, the following locations:

1. Rooms or areas where highly toxic compressed gases are stored or used;

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2. Rooms or areas where Class I, II or III organic peroxides are stored; and

3. Liquid and solid oxidizer storage areas.

Subp. 18. **[F] Section 907.2.5.** IBC [F] Section 907.2.5 is amended by adding a section to read as follows:

**907.2.5.1 Initiation.** Initiation of the fire alarm system in Group H-5 Occupancies and in occupancies used for the manufacture of organic coatings shall be by manual means. Initiation of fire alarm systems installed for highly toxic gases, organic peroxides and oxidizers shall be by automatic means, as specified in Chapters 37, 39 and 40.

Subp. 19. **[F] Section 907.2.5.** IBC [F] Section 907.2.5 is amended by adding a section to read as follows:

**907.2.5.2** Notification. Activation of the fire alarm system in Group H-5 Occupancies and in occupancies used for the manufacture of organic coatings shall initiate a general evacuation signal. Activation of the automatic detection systems installed for highly toxic gases, organic peroxides, and oxidizers shall sound a local alarm.

Subp. 20. [Repealed, 32 SR 7]

Subp. 21. [Repealed, 32 SR 7]

Subp. 22. **[F] Section 907.2.6.** IBC [F] Section 907.2.6 and all subsections are deleted in their entirety and replaced with the following:

**907.2.6 Group I, general.** A fire alarm system shall be installed in accordance with Sections 907.2.6 through 907.2.6.4.3 in Group I occupancies.

**907.2.6.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitors' closets, trash-collection rooms, storage rooms, lounges, gift shops, and similar areas. Automatic smoke detectors shall be provided in waiting areas that are open to corridors.

**Exception:** Manual fire alarm boxes in patient sleeping areas of Group I-1 and I-2 occupancies shall not be required at exits if located at all nurses' stations or other constantly attended staff locations, provided such fire alarm boxes are visible and continuously accessible and that travel distances required by Section 907.4.1 are not exceeded.

**907.2.6.2** Notification. Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, activation of the fire alarm system shall immediately transmit an alarm to an approved central station or remote station service.

### **Exceptions:**

1. In lieu of audible notification appliances, visible notification appliances shall be allowed to be used in critical care areas.

2. Where occupants are incapable of evacuating themselves because of age, physical/mental disabilities, or physical restraint, only the attendants or other personnel required to evacuate occupants from a zone, area, floor or building shall be required to be notified. This notification shall include means to readily identify the zone, area, floor or building in need of evacuation.

**907.2.6.3 Group I-2 Occupancies.** Corridors in hospitals, nursing homes (both intermediate care and skilled nursing facilities), board and care homes and detoxification facilities and spaces open to the corridors shall be protected by an automatic smoke-detection system.

**907.2.6.3.1 Patient room smoke detectors.** Smoke detectors that receive their primary power from the building wiring shall be installed in patient sleeping rooms of hospitals and nursing homes. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located and shall cause an audible and visual alarm at the nurse's station attending the room.

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**907.2.6.4 Group I-3 Occupancies.** Group I-3 occupancies shall be provided with a fire alarm system installed for alerting staff.

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**907.2.6.4.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitors' closets, trash-collection rooms, storage rooms, lounges, gift shops, commissaries and similar areas. Actuation of an automatic fire-extinguishing system, a manual fire alarm box or a fire detector shall initiate an approved fire alarm signal, which automatically notifies staff. Presignal systems shall not be used.

**907.2.6.4.2 Manual fire alarm boxes.** Manual fire alarm boxes are not required to be located in accordance with Section 907.4 where the fire alarm boxes are provided at staff-attended locations having direct supervision over areas where manual fire alarm boxes have been omitted.

Manual fire alarm boxes are permitted to be locked in areas occupied by detainees, provided that staff members are present within the subject area and have keys readily available to operate the manual fire alarm boxes.

**907.2.6.4.3 Smoke detectors.** An approved automatic smoke-detection system shall be installed throughout resident housing areas, including sleeping areas and contiguous day rooms, group activity spaces and other common spaces normally accessible to residents.

## **Exceptions:**

1. Other approved smoke-detection arrangements providing equivalent protection, such as placing detectors in exhaust ducts from cells or behind protective grills, are allowed when necessary to prevent damage or tampering.

2. Smoke detectors are not required in sleeping rooms with four or fewer occupants in smoke compartments that are equipped throughout with an approved automatic sprinkler system.

Subp. 23. [F] Section 907.2.7. IBC [F] Section 907.2.7 is deleted.

Subp. 24. [F] Section 907.2.7.1. IBC [F] Section 907.2.7.1 is deleted.

Subp. 25. [F] Section 907.2.8. IBC [F] Section 907.2.8 is amended to read as follows:

**907.2.8 Group R-1, general.** A fire alarm system shall be installed in accordance with Sections 907.2.8 through 907.2.8.3 in Group R-1 occupancies.

### **Exceptions:**

1. A fire alarm system is not required in buildings not over two stories in height where all individual guest rooms and contiguous attic and crawl spaces are separated from each other and public or common areas by at least one-hour fire partitions and each guest room has an exit directly to a public way, exit court or yard.

2. Buildings containing five or less guest rooms shall be allowed to be equipped with approved multiple-station smoke detectors installed as required for Group R-3 Occupancies. Installation shall be in accordance with Section 907.2.10.

**907.2.8.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, shops, laundry rooms, mechanical and electrical rooms, trash collection rooms, storage rooms, gift shops, locker rooms and similar areas. Automatic smoke detectors shall be provided in all common areas and interior corridors serving as required means of egress.

**Exception:** System fire and smoke detectors are not required when an approved automatic fire extinguishing system is installed throughout the building and manual activation is provided at a constantly attended location.

**907.2.8.2** Notification. Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

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**907.2.8.3 Guest room detectors.** Guest room smoke detectors required by Section 907.2.10 shall not be connected to a fire alarm system.

**Exception:** Connection of such detectors for annunciation only.

Subp. 26. **[F] Section 907.2.9.** IBC **[F]** Section 907.2.9 is amended, and subsections added, to read as follows:

**907.2.9 Group R-2, general.** A fire alarm system shall be installed in accordance with Sections 907.2.9 through 907.2.9.2 in Group R-2 occupancies where:

1. Any guest room or dwelling unit is located two or more stories above the story containing the lowest level of exit discharge;

2. Any guest room or dwelling unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit;

3. The building contains more than 16 dwelling units or guest rooms; or

4. The building is used as a dormitory, convent, monastery, fraternity, or sorority and has an occupant load of 20 or more.

**Exception:** A fire alarm system is not required in buildings not over two stories in height where all dwelling units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least one-hour fire partitions and each dwelling unit has an exit directly to a public way, exit court or yard.

**907.2.9.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Automatic fire detectors shall be provided in boiler and furnace rooms, trash-collection rooms, shops, laundry rooms, mechanical and electrical rooms, storage rooms, and similar areas. Automatic smoke detectors shall be provided in all common areas and interior corridors serving as required means of egress.

**Exception:** System fire and smoke detectors are not required when an approved automatic fire extinguishing system is installed throughout the building.

**907.2.9.2** Notification. Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

**907.2.9.3 Dwelling unit smoke detectors.** Dwelling unit smoke detectors required by Section 907.2.10 shall not be connected to the building fire alarm system.

**Exception:** Connection of such detectors for annunciation only.

Subp. 26a. **[F] Section 907.2.10.1.4.** IBC Section 907.2.10.1 is amended by adding a subsection to read as follows:

**907.2.10.1.4 Fire station and emergency medical quarters.** Areas used for sleeping in fire stations and emergency medical and ambulance crew quarters shall be provided with single station smoke detectors in accordance with Section 907.2.10.

Subp. 27. **[F] Section 907.2.10.2.** IBC [F] Section 907.2.10.2 is amended to read as follows:

**907.2.10.2 Power source.** In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

### **Exceptions:**

1. Smoke alarms are not required to be equipped with battery backup in Group R-1 occupancies where they are connected to an emergency electrical system.

2. Smoke alarms are not required to be equipped with battery backup in Group R-2 occupancies equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

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Subp. 27a. **[F]** Section 907.2.10.5. IBC [F] Section 907.2.10 is amended by adding a subsection to read as follows:

**907.2.10.5 Smoke alarms in arc-fault protected circuits.** Smoke alarms receiving their primary power supply from electrical circuits that are protected with arc-fault circuit interruption must have a backup power supply.

Subp. 28. **[F] Section 907.2.** IBC **[F]** Section 907.2 is amended by adding sections to read as follows:

**907.2.24 Residential hospices.** A fire alarm system shall be installed in accordance with Section 907.2.24 in residential hospices. When automatic sprinkler systems or automatic fire detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

**907.2.24.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, kitchens, laboratories, shops, gift shops, commissaries, laundry and soiled linen rooms, mechanical and electrical rooms, locker rooms, storage rooms, janitors' closets, trash collection rooms, lounges and similar areas. Automatic smoke detectors shall be provided in sleeping rooms, corridors and spaces open to the corridors.

**Exception:** Manual fire alarm boxes are not required at exits if manual fire alarm boxes are located at all nurses' stations or other continuously attended staff locations, provided such fire alarm boxes are visible and continuously accessible and that travel distances required by Section 907.4.1 are not exceeded.

**907.2.24.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, the fire alarm system shall be monitored by an approved central station service in accordance with Section 903.4.1.

**Exception:** In lieu of audible notification appliances, visible notification appliances shall be allowed to be used in sleeping areas.

Subp. 29. [Repealed, 32 SR 7]

Subp. 30. [F] Section 907.9.2. IBC [F] Section 907.9.2 is amended to read as follows:

**907.9.2** Audible alarms. Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: 75 dBA in Groups R and I-1 occupancies; 90 dBA in mechanical equipment rooms; and 60 dBA in other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 105 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

Exception: Visible alarm notification appliances shall be allowed in lieu of audi-

ble alarm notification appliances in critical care areas of Group I-2 occupancies.

Subp. 31. **[F] Section 907.10.** IBC [F] Section 907.10 is amended, and subsections added, to read as follows:

**907.10 Fire safety functions.** Automatic fire detectors required by Section 907.2 are to activate notification appliances in accordance with those sections. Where automatic fire detectors are installed for other fire safety functions, they shall perform the intended function upon activation. Where automatic detectors are installed for fire safety functions and the building has a fire alarm system, such detectors shall activate supervisory signals at the fire alarm control panel or at a constantly attended location. Where the building does not have a fire alarm system, such detectors shall activate a visual and audible supervisory signal at an approved location, which shall indicate the source of the signal.

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**907.10.1** Air distribution and air-handling systems. Smoke detectors installed to shut down the air distribution or air-handling system shall, upon activation, perform the intended function. Air distribution or air-handling equipment that is part of a smoke-control system shall switch to smoke-control mode upon activation of a detector.

**907.10.1.1 Fire alarm system interface.** Smoke detectors that are installed in air distribution or air-handling systems for shutdown purposes and that are connected to a fire alarm system shall not sound a general evacuation signal.

**907.10.2 Elevator control functions.** Smoke detectors that are installed to control or recall elevators or to control doors for elevators, elevator lobbies, or elevator shafts and that are connected to a fire alarm system shall not sound a general evacuation signal. Elevator recall and firefighter's emergency operation for elevators shall only be controlled by elevator smoke detectors and shall not initiate upon other building fire detectors or evacuation signals.

**907.10.3 Door hold-open functions.** Smoke detectors that are installed to hold open fire doors under nonemergency conditions and that are connected to a fire alarm system shall sound a general evacuation signal when the doors being held open are part of the means of egress corridor or stair system. Door hold-open smoke detectors are not required to activate a visual or audible signal.

Subp. 32. [F] Section 907.11. IBC [F] Section 907.11 is deleted.

Subp. 33. [F] Section 907.14. IBC [F] Section 907.14 is deleted.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.0909 SECTION 909, SMOKE CONTROL SYSTEMS.

Subpart 1. **[F] Section 909.4.** IBC [F] Section 909.4 is amended by adding a subsection to read as follows:

**909.4.7 Door opening force.** With any of the design methods allowed by Section 909, the door opening force, latch release, and set-in-motion force shall comply with Section 1008.1.2 requirements when the system is in smoke control mode.

Subp. 2. **[F] Section 909.21.** IBC **[F]** Section 909 is amended by adding a subsection to read as follows:

**909.21 High-rise and covered mall smoke-exhaust systems.** High-rise buildings and covered mall buildings exceeding 50,000 square feet (4645 m<sup>2</sup>) in floor area, excluding anchor stores, shall be equipped with a post-fire smoke exhaust system installed and maintained in accordance with Section 913.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.0910 [F] SECTION 910, SMOKE AND HEAT VENTS.

IBC [F] Section 910 is amended to read as follows:

## [F] SECTION 910

#### SMOKE AND HEAT VENTS

Subpart 1. **[F] Section 910.1.** IBC [F] Section 910.1 is amended by adding sections to read as follows:

**910.1.1 Required venting method.** Required smoke and heat venting shall be accomplished with mechanical smoke exhaust according to Section 910.4.

### **Exceptions:**

1. Calculated engineering design of mechanical smoke exhaust in accordance with Section 910.5 shall be permitted for buildings sprinklered throughout.

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2. For nonsprinklered buildings, smoke and heat vents as specified in Section 910.3 shall be permitted.

3. Where approved by the code official, smoke and heat vents as specified in Section 910.3 shall be permitted in sprinklered buildings.

**910.1.2 Listing.** Smoke and heat vents and mechanical smoke exhaust fans shall be listed for the intended purpose.

**910.1.3 Curtain boards.** When mechanical smoke exhaust is provided in accordance with Section 910.4 or 910.5, curtain boards are only required at the separation between areas protected with early suppression fast response (ESFR) sprinklers and conventional sprinkler systems.

Subp. 2. [F] Section 910.4. IBC [F] Section 910.4 is amended to read as follows:

**910.4 Mechanical smoke exhaust.** Mechanical smoke exhaust shall be in accordance with Sections 910.4.1 through 910.4.6.

Subp. 3. [F] Section 910.4.3. IBC [F] Section 910.4.3 is amended to read as follows:

**910.4.3 Operation.** Mechanical smoke exhaust fans shall be automatically activated upon sprinkler system water flow. A 5 to 10 minute delay shall be provided between the sprinkler water flow signal and activation of the exhaust fans. In addition, individual manual controls of each fan unit shall also be provided.

**Exception:** When required by the code official, initiation of mechanical smoke exhaust fans shall be only through manual activation.

Subp. 4. [F] Section 910.4.5. IBC [F] Section 910.4.5 is amended to read as follows:

**910.4.5 Supply air.** Supply air for exhaust fans shall be sized to provide a minimum of 50 percent of the required exhaust. Air velocity at each supply air opening shall not exceed an average of 200 feet per minute when measured 4 feet (1219 mm) in front of the opening. Openings for supply air shall be uniformly distributed around the periphery of the area served and be located or ducted to a position not more than one-half the storage height above the floor. Supply air openings shall open automatically upon operation of the smoke exhaust system and shall not require a manual action at each supply opening for operation. Supply air openings shall be kept clear of storage or obstructions to airflow for at least four feet (1219 mm) in front of the opening. Supply air openings shall be separated from exhaust fans and exterior combustibles to prevent introduction of smoke into the building.

Subp. 5. **[F] Section 910.** IBC [F] Section 910 is amended by adding sections to read as follows:

**910.5 Calculated engineering design of mechanical smoke exhaust.** Calculated engineering design of mechanical smoke exhaust shall be in accordance with Sections 910.5.1 through 910.5.5.

**910.5.1 Methodology.** Mechanical smoke exhaust systems shall be designed to remove smoke after a fire is extinguished and to assist the fire department during suppression operations or during marginal sprinkler control situations. They are not considered life safety systems and are not designed for occupant safety.

**910.5.2 Calculation method.** Volumetric flow rate calculations shall demonstrate that the system will provide at least three air changes per hour for the space required to be provided with smoke exhaust. When only a portion of a space is used for high-piled storage requiring smoke exhaust, the volume to be extracted shall be based on the ceiling height multiplied by the actual gross floor area for storage.

**910.5.3 Operation.** Mechanical smoke exhaust fans shall be automatically activated upon sprinkler system water flow. A 5- to 10-minute delay shall be provided between the sprinkler water flow signal and activation of the exhaust fans. In addition, individual manual controls of each fan unit shall also be provided.

**Exception:** When required by the code official, initiation of mechanical smoke exhaust fans shall be only through manual activation.

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**910.5.4 Supply air.** Supply air for exhaust fans shall be sized to provide a minimum of 50 percent of the required exhaust. Air velocity at each supply air opening shall not exceed an average of 200 feet per minute when measured 4 feet (1219 mm) in front of the opening. Openings for supply air shall be uniformly distributed around the periphery of the area served and be located or ducted to a position not more than one-half the storage height above the floor. Supply air openings shall open automatically upon operation of the smoke exhaust system and shall not require a manual action at each supply opening for operation. Supply air openings shall be kept clear of storage or obstructions to airflow for at least 4 feet (1219 mm) in front of the opening. Supply air openings shall be separated from exhaust fans and exterior combustibles to prevent introduction of smoke into the building.

**910.5.5 Equipment.** Wiring and controls shall be as required in Section 910.4.4. Interlocks shall be as required in Section 910.4.6. Exhaust fans shall be uniformly spaced and each fan shall have a maximum individual capacity of 30,000 cfm (850 m<sup>3</sup>/min).

**910.6 Testing and maintenance.** Mechanical smoke exhaust systems shall be tested and maintained as required by Sections 910.6.1 through 910.6.4.

**910.6.1 Acceptance testing.** Mechanical smoke exhaust systems shall be acceptance tested as required by Sections 909.18.2 through 909.18.5 and 909.19.

**910.6.1.1 Controls.** For testing purposes, each smoke exhaust system equipped for automatic activation shall be put into operation by the actuation of the automatic initiating device. Control sequences shall be verified throughout the system, including verification of override from the firefighter's control panel when systems are equipped for automatic activation.

**910.6.2 Special inspections.** Special inspections for mechanical smoke exhaust shall be conducted according to Section 909.18.8.

**910.6.3 Maintenance.** Mechanical smoke exhaust systems, including exhaust fans, supply air openings and controls, shall be maintained and unobstructed.

**910.6.4 Operational testing.** Operational testing of the smoke exhaust system shall include all equipment such as initiating devices, fans, dampers, controls, and supply air openings. Mechanical smoke exhaust systems shall be operated and tested under each control sequence at least annually.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.0912 [F] SECTION 912, FIRE DEPARTMENT CONNECTIONS.

IBC [F] Section 912.2 is amended by adding a subsection to read:

**912.2.3 Connection height.** Newly installed fire department connections shall be located not less than 18 inches (457 mm) and not more than 4 feet (1.2 m) above the level of the adjacent grade or access level.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.0913 SECTION 913, POST-FIRE EXHAUST SYSTEM.

IBC Chapter 9 is amended by adding a section and subsections to read as follows:

**SECTION 913** 

## POST-FIRE SMOKE EXHAUST SYSTEM

**913.1 Scope and purpose.** This section applies to post-fire smoke exhaust systems when they are required by other provisions of this code. The purpose of this section is to establish minimum requirements for the design and installation of smoke exhaust systems that are intended for the timely restoration of operations and overhaul activities once a fire is extinguished.

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**913.2 General design requirements.** Post-fire smoke exhaust systems are not intended or designed as life safety systems and are not required to meet the provisions of Section 909. These systems are permitted to use dedicated equipment, the normal building HVAC system or other openings and shall have the capability to exhaust smoke from occupied spaces. Smoke removal may be by either mechanical or natural ventilation, but shall be capable of removing cold smoke. Smoke exhaust shall be permitted through elevator shafts. Smoke removed from a space must be discharged to a safe location outside the building and may not be recirculated into the building in accordance with the mechanical code.

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**913.3 Exhaust capability.** The system shall have an air supply and smoke exhaust capability that will provide a minimum of three air changes per hour or remove smoke to less than a 5 percent concentration within one hour of operation. The system need not exhaust from all areas at the same time, but is permitted to be zoned based on the largest fire area served. For the purpose of calculating system size, the height of a compartment shall be considered to run from slab to slab and include the volume above suspended ceilings.

**913.4 Operation.** The smoke exhaust system shall be operated by manual controls that are readily accessible to the fire department at an approved location and shall incorporate an approved control diagram. When a system is zoned into areas of operation less than the entire building, each zone shall have an individual control. Fire department manual controls of post-fire smoke exhaust systems shall have the highest priority of any control point within the building. Smoke exhaust shall not be permitted through any exit enclosure as defined in Section 1002.

**913.5 Inspection and testing.** Post-fire smoke exhaust systems shall be inspected and tested annually.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1000 [Repealed, 19 SR 1340]

**1305.1000** [Repealed, 27 SR 1474]

### **1305.1002 SECTION 1002, DEFINITIONS.**

IBC Section 1002.1 is amended by adding or replacing the following definitions:

**AISLE.** That portion of an exit access that connects an aisle accessway to an exit access doorway, corridor, or an exit.

**CORRIDOR.** An interior passageway having a length at least three times its width, having walls, partitions, or other obstructions to exit travel over 6 feet (1829 mm) in height on two opposing sides, and having openings from rooms or similar spaces.

**ROOM.** A space or area bounded by any obstruction over 6 feet in height which at any time encloses more than 80 percent of the perimeter of the area. In computing the unobstructed perimeter, openings less than 3 feet (914 mm) in clear width and less than 6 feet 8 inches (2032 mm) in height shall not be considered. Aisles and corridors shall not be construed to form rooms.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.194* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

1305.1003 [Repealed, 32 SR 7]

**1305.1004** [Renumbered 1305.1000, subpart 1]

1305.1004 [Repealed, 32 SR 7]

## 1305.1008 SECTION 1008, DOORS, GATES, AND TURNSTILES.

Subpart 1. [Repealed, 32 SR 7]

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. [Repealed, 32 SR 7]

## 199 ADOPTION OF INTERNATIONAL BUILDING CODE 1305.1008

Subp. 4. **IBC Section 1008.1.3.** IBC Section 1008.1.3 is amended by adding a subsection to read as follows:

**1008.1.3.6 Special egress control devices.** Where the clinical needs of the patients require specialized security measures for their safety, door locking arrangements are permitted in Group I-1 occupancies (this includes use groups as described in Group I-1 occupancies that are identified as either Group R-3 or Group R-4 occupancies because of occupant load) and Group I-2 occupancies provided that:

1. keys or devices that function like keys are carried by staff at all times;

2. in at least one egress path, not more than one such arrangement is located;

3. the building or fire area is protected by an approved automatic sprinkler system in accordance with Section 903.3.1.1 (NFPA 13) and an approved fire alarm system having smoke detection, installed throughout the exit corridor system and areas open to the exit corridor;

4. locking devices automatically unlock upon activation of any of the following:

a. automatic sprinkler system;

b. automatic smoke detection system;

c. automatic fire alarm system; or

d. loss of electrical power;

5. locking devices can be remotely unlocked from an approved location within the secured area;

6. there is no public assembly space within the secured area;

7. 24-hour patient supervision is provided within the secured area;

8. relocking of the locking device is by manual means from an approved location within the secured area;

9. locking devices are designed to fail in the open position;

10. special egress control devices are not permitted in buildings of type III-B or V-B construction, and shall not exceed one story in height when in type III-A, IV-HT, or type V-A construction;

11. floor levels within the building or portion of the building with the special egress control devices shall be divided into at least two compartments by smoke barriers meeting the requirements of Section 709; and

12. substitution of the automatic sprinkler system for one-hour fire-resistance-rated construction (pursuant to Table 601, footnote d) is permitted.

Subp. 5. **IBC Section 1008.1.4.** IBC Section 1008.1.4 is amended by modifying exception 5 to read as follows:

#### **Exceptions:**

5. Exterior decks, patios, or balconies that are part of Type B dwelling units, have impervious surfaces, and that are not more than two inches (50 mm) below the finished floor level of the adjacent interior space of the dwelling unit.

Subp. 6. **IBC Section 1008.1.8.3.** IBC Section 1008.1.8.3 is amended to read as follows:

**1008.1.8.3 Locks and latches.** Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint.

2. In buildings in occupancy Group A having an occupant load of 300 or less, in buildings in occupancy Groups B, F, M, and S, and in churches, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

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2.1. The locking device is readily distinguishable as locked.

2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

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2.3. The use of the key-operated locking device is revokable by the building official for due cause.

3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware.

4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or tool.

5. Delayed egress locks, installed and maintained in conformance with Section 1008.1.8.6.

6. Special egress-control devices installed and maintained in conformance with Section 1008.1.3.6.

7. In rooms, other than cells, where occupants are being restrained for safety or security reasons, special locking arrangements which comply with the requirements of Section 1008.1.10 are permitted.

Subp. 7. **IBC Section 1008.1.8.6.** IBC Section 1008.1.8.6 is amended to read as follows:

**1008.1.8.6 Delayed egress locks.** Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.

2. The doors unlock upon loss of power controlling the lock or lock mechanism.

3. The door locks shall have the capability of being unlocked by a signal from the fire command center.

4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for one second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.

6. Emergency lighting shall be provided at the door.

Subp. 8. **IBC Section 1008.1.** IBC Section 1008.1 is amended by adding subsections as follows:

**1008.1.10 Special locking arrangements.** Special locking arrangements meeting the requirements of Sections 1008.1.10 through 1008.1.10.5 are permitted for rooms, other than cells, where the occupants are being restrained for safety or security reasons. The use of

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Sections 1008.1.10 through 1008.1.10.5 may be revoked by the fire code official or building official for due cause.

**1008.1.10.1 Locking hardware.** Locking devices shall release upon any of the following conditions:

- 1. Activation of the automatic sprinkler system.
- 2. Activation of any automatic fire detection device.
- 3. Activation of any automatic fire alarm system.
- 4. Loss of electrical power to the locking device or the fire alarm system.
- 5. Activation of the fire alarm trouble signal.
- 6. Operation of a manual switch located in an approved location.

All locking devices shall be designed to fail in the open position following the release of the locking devices for any of the conditions specified above. Relocking of the devices shall be by manual means only at the door.

**1008.1.10.2 Fire-extinguishing system.** When special locking arrangements are used, the room or area being secured shall be protected with quick-response sprinklers.

**1008.1.10.3 Fire alarm and detection.** When special locking arrangements are used, the room or area and spaces between the room or area and an exterior exit door shall be protected with automatic smoke detection connected to the building's fire alarm system. If the walls of the room or area do not extend to the ceiling, automatic smoke detection can be provided in the adjacent room or area, provided that there are no substantial obstructions to delay activation of the smoke detection.

**1008.1.10.4 Construction.** Rooms or areas containing these special locking arrangements shall be constructed of noncombustible materials having a minimum one-hour fire-resistive construction. Doors separating the rooms from other spaces shall swing in the direction of egress travel from the room and have a fire-protection rating of not less than 20 minutes. Doors need not be self closing. The interior finish of the wall and ceiling surfaces must not exceed a Class C.

**1008.1.10.5 Location.** The room or rooms shall be located on a floor that provides direct grade-level access when located in buildings or portions thereof consisting of nonrated construction.

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 325B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

1305.1009 [Renumbered 1305.1000, subps 3 and 4]

### 1305.1009 SECTION 1009, STAIRWAYS AND HANDRAILS.

IBC Section 1009.9. IBC Section 1009.9 is amended to read as follows:

**1009.9** Alternating tread devices. Alternating tread devices are limited to an element of a means of egress in buildings of Groups F, H, and S from a mezzanine not more than 250 square feet  $(23 \text{ m}^2)$  in area and which serves not more than five occupants; in buildings of Group I-3 from a guard tower, observation station, or control room not more than 250 square feet  $(23 \text{ m}^2)$  in area and for access to unoccupied roofs. Access to mechanical equipment or appliances on a roof shall be in accordance with Section 1209.3.1 and the Minnesota Mechanical Code.

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

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#### 1305.1013 SECTION 1013, GUARDS.

Subpart 1. **IBC Section 1013.1.** IBC Section 1013.1 is amended by adding an exception as follows:

## **Exception:**

8. In accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112, guards are not required on bleachers 55 inches or less in height.

Subp. 2. **IBC Section 1013.2.** IBC Section 1013.2 is amended by modifying exception 2 to read as follows:

2. The height in assembly seating areas shall be in accordance with Section 1025.14 and the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112.

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

#### 1305.1014 SECTION 1014, EXIT ACCESS.

IBC Section 1014.4 and all subsections are deleted in their entirety and replaced with the following:

**1014.4 Aisles and aisle accessways.** Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles and aisle accessways shall be provided from all occupied portions of the exit access. Aisles and aisle accessways serving assembly areas, other than seating at tables, shall comply with Section 1025. Aisles and aisle accessways serving reviewing stands, grandstands, and bleachers shall comply with Section 1024.

**1014.4.1 Width determination.** Where tables or counters are served by fixed seats, the width of the aisle or aisle accessway shall be measured from the back of the seat. Where seating is located at a table or counter and is adjacent to an aisle or aisle accessway, the measurement of required clear width of the aisle or aisle accessway shall be made to a line 19 inches (483 mm) measured perpendicular to and away from and running parallel to the edge of the table or counter. In the case of other side boundaries for aisle or aisle accessways, the clear width shall be measured to walls, tread edges, or other obstructions.

The required width of the aisles and aisle accessways shall be unobstructed.

**Exception:** Doors, when fully opened, and handrails shall not reduce the required width by more than 7 inches (178 mm). Doors in any position shall not reduce the required width by more than one-half. Other nonstructural projections such as trim and similar decorative features are permitted to project into the required width 1.5 inches (38 mm) from each side.

**1014.4.1.1 Minimum aisle accessway width.** Aisle accessways not required to be accessible by Chapter 11 shall provide a minimum of 12 inches (305 mm) of width, plus 0.5 inches (12.7 mm) of width for each additional one foot (305 mm), or fraction thereof, beyond 12 feet (3658 mm) of aisle accessway length.

**Exception:** Portions of an aisle accessway having a length not exceeding six feet and used by a total of not more than four persons.

**1014.4.1.2 Minimum aisle width.** The minimum clear width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than 36 inches (914 mm).

**Exception:** Nonpublic aisles serving less than 50 people, and are not required to be accessible by Chapter 11, need not exceed 28 inches (711 mm) in width.

## 1014.4.2 Length.

**1014.4.2.1 Aisle accessway.** The length of travel along the aisle accessway shall not exceed 30 feet (9144 mm) to an aisle or exit access doorway.

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**1014.4.2.2 Aisle.** The length of travel along an aisle or combination aisle accessway and aisle to a point where a person has a choice of two or more paths of egress travel to separate exits or exit access doorways shall not exceed that permitted by Section 1014.3 for common path of egress travel.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.1015 SECTION 1015, EXIT AND EXIT ACCESS DOORWAYS.

IBC Section 1015.1 is amended to read as follows:

**1015.1 Exit or exit access doorways required.** Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

1. The occupant load of the space exceeds the values in Table 1015.1.

**Exception:** In Groups R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 16 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

2. The common path of egress travel exceeds the limitations of Section 1014.3.

3. Where required by Sections 1015.3, 1015.4, and 1015.5.

4. When located in buildings used for educational purposes, laboratories and prep rooms that exceed 500 square feet in area and contain hazardous materials.

**Exception:** Group I-2 occupancies shall comply with Section 1014.2.2.

[Table 1015.1 is unchanged.]

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.1019** [Renumbered 1305.1000, subp. 5]

### 1305.1019 NUMBER OF EXITS AND CONTINUITY.

Subpart 1. **IBC Section 1019.1.** IBC Section 1019.1 is amended to read as follows:

**1019.1 Minimum number of exits.** Occupants within rooms and spaces shall be provided with and have access to the minimum number of approved independent exits as required by Section 1015.1. Occupants on every story, in every basement, and in every building shall be provided with and have access to the minimum number of approved independent exits as required by Table 1019.1, except as modified in Section 1019.2. For the purposes of this chapter, occupied roofs shall be provided with exits as required for stories. The required number of exits from any story, basement, or individual space shall be maintained until arrival at grade or the public way. [Table 1019.1 is unchanged.]

Subp. 2. **IBC Section 1019.1.3.** IBC Section 1019.1 is amended by adding a subsection to read as follows:

**1019.1.3 Press box roof access.** The means of egress from occupied press box roofs shall comply with the provisions of this chapter. Occupied press box roofs shall be provided with guards in accordance with Section 1013.

**Exception:** Press box roofs used as camera, video, or security platforms or similar uses having an occupant load of nine or less shall have access to not less than one means of egress. The means of egress is permitted to be by way of a roof hatch or scuttle and ships ladder as required by Section 1209.3.

Subp. 3. IBC Section 1019.2. IBC Section 1019.2 is amended to read as follows:

**1019.2 Buildings or stories with one exit.** Only one exit shall be required in buildings or stories as described below:

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1. Buildings or stories described in Table 1019.2, provided that the building has not more than one level below the first story above grade plane.

2. Buildings or stories of a Group R-3 occupancy.

3. Single-level buildings with the occupied space at the level of exit discharge provided that the story or space complies with Section 1015.1 as a space with one means of egress.

Subp. 4. IBC Table 1019.2. IBC Table 1019.2 is amended to read as follows:

## Table 1019.2

### Buildings or Stories with One Exit

Occupancy	Maximum Height of Building Above Grade Plane	Maximum Occupants (or Dwelling Units) per Floor (with One Exit) and Travel Distance
$A,B^{d},E^{e},F,M,U$	1 story	49 occupants and 75 feet travel distance
H-2,H-3	1 story	3 occupants and 25 feet travel distance
H-4,H-5,I,R	1 story	10 occupants and 75 feet travel distance
$S^{a}$	1 story	29 occupants and 100 feet travel distance
$\mathbf{B}^{\mathrm{b}}$ ,F,M, $\mathbf{S}^{\mathrm{a}}$	2 stories	30 occupants and 75 feet travel distance
R-2	2 stories <sup>c</sup>	4 dwelling units and 50 feet travel distance

[Footnotes unchanged.]

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

### 1305.1025 SECTION 1025, ASSEMBLY.

**IBC Section 1025.1.1.** IBC Section 1025.1.1 is amended to read as follows:

**1025.1.1** Bleachers, grandstands, and folding and telescopic seating shall comply with International Code Council (ICC) 300, with the following amendments to ICC 300:

a. ICC 300 Section 404.5 is amended by adding an exception as follows:

**Exception:** Aisles shall not be required to be more than 66 inches (1.676 mm) in width when the following are satisfied:

1. the seating area served by such aisles is composed entirely of bleachers;

2. the row-to-row dimension is 28 inches (71 cm) or less; and

3. front egress is not limited.

b. ICC 300 Section 405.1 is amended to read as follows:

**Section 405.1 Aisles.** The minimum width of aisles shall be in accordance with Section 404.5, but not less than that required by this section. An aisle is not required in seating facilities where all of the following conditions exist:

1. Seats are without backrest.

2. The rise from row to row does not exceed 6 inches (152 mm) per row.

Exception: Bleachers 55 inches or less in height.

3. The row to row spacing does not exceed 28 inches (711 mm) unless the seat boards and footboards are not the same elevation.

4. The number of rows does not exceed 16 rows in height.

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5. The first seat board is not more than 12 inches (305 mm) above the ground floor or a cross aisle.

Exception: Bleachers 55 inches or less in height.

6. Seat boards have a continuous flat surface.

7. Seat boards provide a walking surface with a minimum width of 11 inches (279 mm).

8. Egress from seating is not restricted by rails, guards, or other obstructions.

c. ICC 300 Section 405.6 is amended by adding an exception as follows:

3. Aisles serving bleachers in compliance with Section 404.5.

d. ICC 300 Section 408.1 is amended by adding an exception as follows:

(First exception is numbered as 1.)

2. In accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112:

(a) bleachers must have vertical perimeter guards or other approved guards that address climbability and are designed to prevent accidents; and

(b) guards are not required on bleachers 55 inches (1397 mm) and less in height.

e. ICC 300 Section 408.3 is amended to read as follows:

**408.3 Guard design.** Guards and their attachment shall be designed to resist the loads indicated in Section 303. Bleachers must have vertical perimeter guards or other approved guards that address climbability and are designed to prevent accidents, in accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112.

f. ICC 300 Chapter 5 is deleted and replaced with the following:

All bleachers or bleacher open spaces over 55 inches (1397 mm) above grade or the floor below, and all bleacher guardrails, if any part of the guardrail is over 30 inches (762 mm) above grade or the floor below, must be certified to conform with the safety requirements contained in Minnesota Statutes, section 326B.112.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

## 1305.1026 SECTION 1026, EMERGENCY ESCAPE AND RESCUE.

IBC Section 1026.1 is amended to read as follows:

**1026.1 General.** In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R as applicable in Section 101.2 and Group I-1 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such opening shall open directly into a public way, public alley, or to a yard or court that opens to a public way.

## **Exceptions:**

1. In other than Group R-3 occupancies as applicable in Section 101.2, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

2. In other than Group R-3 occupancies as applicable in Section 101.2, sleeping rooms provided with a door to a fire-resistance-rated corridor having access to two remote exits in opposite directions.

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3. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.

4. High-rise buildings in accordance with Section 403.

5. Emergency escape and rescue openings are not required from basements or sleeping rooms which have an exit door or exit access door that opens directly into a public way, or to a yard, court, or exterior exit balcony that opens to a public way.

6. Basements without habitable spaces and having no more than 200 square feet  $(18.6 \text{ m}^2)$  in floor area shall not be required to have emergency escape windows.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1100 [Repealed, 19 SR 1340]

### 1305.1101 SECTION 1101, GENERAL.

IBC Section 1101.1 is amended to read as follows:

**1101.1 General.** Buildings or portions of buildings shall be accessible to persons with disabilities as required by Minnesota Rules, chapter 1341. Refer to Minnesota Rules, chapter 1341, the Minnesota Accessibility Code, for the complete application of IBC Chapter 11.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

**History:** 19 SR 1340; 23 SR 2042; 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1200 [Repealed, 19 SR 1340]

**1305.1202** [Repealed, 32 SR 7]

#### 1305.1203 SECTION 1203, VENTILATION.

IBC Section 1203.1 is amended to read as follows:

**1203.1 General.** Buildings shall be provided with natural ventilation in accordance with Section 1203.4 or mechanical ventilation in accordance with Minnesota Rules, chapter 1346.

#### **Exceptions:**

1. Buildings or portions thereof that are not intended for normal human occupancy, or where the primary purpose is not associated with human comfort.

2. Group U occupancies.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.1204** [Repealed, 32 SR 7]

**1305.1207** [Repealed, 32 SR 7]

### 1305.1209 SECTION 1209, ACCESS TO UNOCCUPIED SPACES.

IBC Section 1209.3 is amended, and subsections added, to read as follows:

**1209.3 Mechanical equipment and appliance access.** Access to mechanical equipment and appliances installed in underfloor areas, in attic spaces, and on roofs or elevated structures shall be in accordance with this section and the Minnesota Mechanical Code.

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**1209.3.1 Mechanical equipment and appliances on roofs or elevated structures.** Where mechanical equipment or appliances requiring periodic inspection, service, or maintenance are installed on roofs or elevated structures, a permanent stair shall be provided for access.

**Exception:** A portable ladder may be used for dwellings, replacement equipment on existing buildings, and exterior roof access points not exceeding 16 feet (4.9 m) above grade, unless the building official determines that the unique shape of the roof does not allow safe access with a portable ladder.

The permanent stair shall be as required by relevant safety regulations, but shall not be less than the following:

1. The stair shall be installed at an angle of not more than 60 degrees measured from the horizontal plane.

2. The stair shall have flat treads at least six inches (152 mm) deep and a clear width of at least 18 inches (457 mm) with equally spaced risers at least 10.5 inches (267 mm) high and not exceeding 14 inches (356 mm).

3. The stair shall have intermediate landings not exceeding 18 feet (5.5 m) vertically.

4. Continuous handrails shall be installed on both sides of the stair.

5. Interior stairs shall terminate at the under side of the roof at a hatch or scuttle of at least eight square feet  $(0.74m^2)$  with a minimum dimension of 20 inches (508 mm).

6. When a roof access hatch or scuttle is located within ten feet (3.0 m) of a roof edge, a guard shall be installed in accordance with this code.

7. Exterior stairs shall terminate at the roof access point or at a level landing of at least eight square feet  $(0.74m^2)$  with a minimum dimension of 20 inches (508 mm). The landing shall have a guard installed in accordance with IMC Section 304.9.

**1209.3.1.1 Permanent ladders.** Where a change in roof elevation greater than 30 inches (762 mm) but not exceeding 16 feet (4.9 m) exists, a permanent ladder shall be provided. The ladder may be vertical and shall be as required by relevant safety regulations, but shall not be less than the following:

1. Width shall be at least 16 inches (406 mm).

2. Rung spacing shall be a maximum of 14 inches (356 mm).

3. Toe space shall be at least six inches (152 mm).

4. Side railings shall extend at least 30 inches (762 mm) above the roof or parapet wall.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.1210 SECTION 1210, SURROUNDING MATERIALS.

IBC Section 1210.1 is amended to read as follows:

**1210.1 Floors.** In other than dwelling units, toilet, shower, and bathing room floors shall have a smooth, hard, nonabsorbent surface, such as portland cement, concrete, ceramic tile, sheet vinyl, or other approved floor covering material that extends upward onto the walls at least 5 inches (127 mm).

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1300 [Repealed, 19 SR 1340]

1305.1350 [Repealed, 19 SR 1340]

1305.1355 [Repealed, 11 SR 1405]

1305.1370 [Repealed, 19 SR 1340]

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#### **1305.1400 ADOPTION OF INTERNATIONAL BUILDING CODE**

1305.1400 [Repealed, 19 SR 1340]

1305.1404 [Repealed, 32 SR 7]

### 1305.1405 SECTION 1405, INSTALLATION OF WALL COVERINGS.

Subpart 1. Section 1405.3.2. IBC Section 1405.3.2 is amended to read as follows:

**1405.3.2 Masonry.** Flashing and weepholes shall be located above finished ground level above the foundation wall or slab, and other points of support, including structural floors, shelf angles and lintels where anchored veneers are designed in accordance with Section 1405.5.

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. Section 1405.12.2. IBC Section 1405.12.2 is deleted in its entirety.

**Statutory Authority:** MS s 16B.37; 16B.59 to 16B.76; 326B.02; 326B.101 to 326B.194; 326B.106; 326B.13

**History:** 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 33 SR 1859

**1305.1500** [Repealed, 19 SR 1340]

### 1305.1502 SECTION 1502, DEFINITIONS.

IBC Section 1502.1 is amended by modifying the definition of "Roof Covering" to read as follows:

**ROOF COVERING.** The covering applied to the roof deck for weather resistance, fire classification or appearance. Roof covering materials consist of two basic types: (1) roofing systems, and (2) prepared materials.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

## 1305.1503 SECTION 1503, WEATHER PROTECTION.

Subpart 1. IBC Section 1503.4. IBC Section 1503.4 is amended to read as follows:

**1503.4 Roof drainage.** Design and installation of roof drainage systems shall comply with Minnesota Rules, chapter 4715, Minnesota Plumbing Code, and the following provisions:

**1. Where required.** All roofs shall drain into a separate storm sewer system or to an approved place of disposal. For one- and two-family dwellings, and where approved, storm water is permitted to discharge onto flat areas, such as streets or lawns, provided that the storm water flows away from the building.

**2. Roof design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges, or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.

**3.** Secondary drainage required. Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**4. Separate systems required.** Secondary (emergency) roof drain systems shall have piping and point of discharge separate from the primary system. Discharge shall be above grade in a location which would normally be observed by the building occupants or maintenance personnel.

**5.** Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with the Minnesota State Plumbing Code. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by this code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm).

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The flow through the primary system shall not be considered when sizing the secondary roof drainage system.

Subp. 2. **IBC Section 1503.4.1.** IBC Section 1503.4.1 is deleted in its entirety. **Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

### 1305.1505 FIRE CLASSIFICATION.

IBC Table 1505.1 is amended by deleting footnote "a" from the table. **Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

1305.1506 [Repealed, 27 SR 1474]

### 1305.1507 SECTION 1507, REQUIREMENTS FOR ROOF COVERINGS.

Subpart 1. [Repealed, 32 SR 7]

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. [Repealed, 32 SR 7]

Subp. 4. [Repealed, 32 SR 7]

Subp. 5. Section 1507.10.1. IBC Section 1507.10.1 is amended to read as follows:

**1507.10.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, built-up roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage, except for coal-tar built-up roofs that shall have a design slope of a minimum one-eighth unit vertical in 12 units horizontal (1-percent slope).

Subp. 6. Section 1507.11.1. IBC Section 1507.11.1 is amended to read as follows:

**1507.11.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, modified bitumen membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 7. Section 1507.12.1. IBC Section 1507.12.1 is amended to read as follows:

**1507.12.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, thermoset single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 8. Section 1507.13.1. IBC Section 1507.13.1 is amended to read as follows:

**1507.13.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, thermoplastic single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 9. Section 1507.14.1. IBC Section 1507.14.1 is amended to read as follows:

**1507.14.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, sprayed polyurethane foam roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

Subp. 10. Section 1507.15.1. IBC Section 1507.15.1 is amended to read as follows:

**1507.15.1 Slope.** Unless designed for water accumulation in accordance with Section 1611.2, liquid-applied roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope).

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.1509 SECTION 1509, ROOFTOP STRUCTURES.

IBC Section 1509.2 is amended to read as follows:

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**1509.2 Penthouses.** A penthouse or other projection above the roof in structures of other than Type I construction shall not exceed 28 feet (8534 mm) above the roof where used as an enclosure for tanks or for elevators that run to the roof and in all other cases shall not extend more than 18 feet (5486 mm) above the roof. The aggregate area of penthouses and other rooftop structures shall not exceed one-third the area of the supporting roof. A penthouse, bulkhead, or any other similar projection above the roof shall not be used for purposes other than shelter of mechanical equipment or shelter of vertical shaft openings in the roof.

**Exception:** Accessory uses necessary for the maintenance of building systems shall be permitted when the penthouse is sprinkled in accordance with section 903.1.1.

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Provisions such as louvers, louver blades, or flashing shall be made to protect the mechanical equipment and the building interior from the elements. Penthouses or bulkheads used for purposes other than permitted by this section shall conform to the requirements of this code for an additional story. The restrictions of this section shall not prohibit the placing of wood flagpoles or similar structures on the roof of any building.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

### 1305.1510 SECTION 1510, REROOFING.

IBC Section 1510.5 is amended to read as follows:

**1510.5 Reinstallation of materials.** Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edging, drain outlets, collars and metal counterflashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled unless such aggregate complies with the gradation requirements of ASTM C-33 Standard Specification for Concrete Aggregate.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

**1305.1590** [Repealed, 19 SR 1340]

**1305.1600** [Repealed, 19 SR 1340]

**1305.1604** [Repealed, 32 SR 7]

### 1305.1607 SECTION 1607, LIVE LOADS.

Subpart 1. [Repealed, 32 SR 7]

Subp. 2. Section 1607.12.2. IBC Section 1607.12.2 is amended to read as follows:

**1607.12.2 Vertical impact force.** The maximum wheel loads of the crane shall be increased by the percentages shown below to determine the induced vertical impact or vibration force. Impact load shall be applied to one hoist system at a time for multiple hoist or bridge systems.

Monorails, underhung bridge cranes and pendant operated top running bridge cranes:

15 percent minimum for hoist lift speeds of less than 30 feet per minute.

Percentage equivalent to 0.5 times the hoist lift speed, for lift speeds of 30 to 100 feet per minute.

50 percent maximum for hoist lift speeds greater than 100 feet per minute.

50 percent for magnetic pickup or vacuum lift type systems.

No impact load is required for hand chain (non-powered) hoists.

Cab operated or remotely operated top running bridge cranes:

25 percent minimum.

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Subp. 3. Section 1607.12.3. IBC Section 1607.12.3 is amended to read as follows:

#### 1607.12.3 Lateral force.

Top running powered bridge cranes. The lateral force on top running crane runway beams with powered trolleys shall be calculated as 20 percent of the sum of the rated capacity of the crane and the weight of the hoist and trolley. The lateral force shall be assumed to act horizontally at the traction surface of a runway beam, in either direction perpendicular to the beam, and shall be distributed according to the lateral stiffness of the runway beam and supporting structure. The runway beams shall be designed for the lateral and torsional loads, as well as for the maximum lateral deflection limit of Span/800.

Monorails and underhung bridge cranes.

The bridge girder, underhung bridge crane runway beam and monorails shall be designed with sufficient strength and rigidity to prevent detrimental lateral deflection.

The lateral deflection should not exceed span/800 based on 5 percent of maximum wheel load(s) without vertical impact factor.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

#### 1305.1608 SECTION 1608, SNOW LOADS.

Subpart 1. Section 1608.2. IBC Section 1608.2 is amended to read as follows:

**1608.2 Ground snow loads.** The ground snow loads to be used in determining the design snow loads for buildings and other structures are given in Minnesota Rules, chapter 1303.

Subp. 2. Figure 1608.2. IBC Figure 1608.2 on GROUND SNOW LOADS,  $p_g$ , FOR THE UNITED STATES (PSF) is deleted.

Subp. 3. [Repealed, 32 SR 7]

**Statutory Authority:** *MS s 16B.59; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

1305.1614 [Renumbered 1305.1616]

1305.1616 [Renumbered 1305.1618]

1305.1616 [Repealed, 27 SR 1474]

1305.1618 [Repealed, 27 SR 1474]

1305.1623 [Renumbered 1305.1625]

1305.1625 [Repealed, 27 SR 1474]

1305.1700 [Repealed, 19 SR 1340]

1305.1701 [Repealed, 27 SR 1474]

### 1305.1702 SECTION 1702, DEFINITIONS.

The definition of "approved agency" in IBC Section 1702.1 is amended to read as follows:

**APPROVED AGENCY.** An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved. The structural engineer of record, that engineer's employee or that engineer's agent may conduct tests or furnish inspection services for types of work for which the engineer, employee, or agent is qualified.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

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#### 1305.1704 SECTION 1704, SPECIAL INSPECTIONS.

Subpart 1. [Repealed, 32 SR 7]

Subp. 2. Table 1704.4. IBC Table 1704.4 is amended as follows:

A. Add "X<sup>b</sup>" to the "Periodic" column, row "6. Inspection of concrete and shotcrete placement for proper application techniques."

B. Add footnote "b." to read as follows:

b. Exception: Inspection can be periodic when acceptable to the structural engineer of record and the building official.

Subp. 3. [Repealed, 32 SR 7]

Subp. 4. Table 1704.5.1. IBC Table 1704.5.1, is amended as follows:

A. Add " $X^{b}$ " to the "Periodically during task listed" column, row "4. Grout placement shall be verified to ensure compliance with code and construction document provisions."

B. Add footnote "b." to read as follows:

b. Exception: Inspection can be periodic when acceptable to the structural engineer of record and the building official.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

**History:** 19 SR 1340; 20 SR 2290(NO. 43); 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.1750** [Repealed, 19 SR 1340]

1305.1775 [Repealed, 19 SR 1340]

1305.1790 [Repealed, 15 SR 74]

1305.1795 [Repealed, 19 SR 1340]

1305.1800 [Repealed, 19 SR 1340]

### 1305.1805 SECTION 1805, FOOTINGS AND FOUNDATIONS.

Subpart 1. [Repealed, 32 SR 7]

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. [Repealed, 32 SR 7]

Subp. 4. IBC Section 1805.2. IBC Section 1805.2 is amended to read as follows:

**1805.2 Depth of footings.** The minimum depth of footings below the undisturbed ground surface shall be in accordance with Minnesota Rules, part 1303.1600. Where applicable, the depth of footings shall also conform to Sections 1805.2.1 through 1805.2.3.

Subp. 5. **IBC Section 1805.2.1.** IBC Section 1805.2.1 is amended to read as follows: **1805.2.1 Frost protection.** Except where otherwise protected from frost, foundation walls, piers, and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. The minimum allowable footing depth shall be in accordance with Minnesota Rules, part 1303.1600;

2. Constructing in accordance with ASCE-32; or

3. Erecting on solid rock.

**Exception:** Freestanding buildings meeting all of the following conditions shall not be required to be protected:

1. Classified in Occupancy Category I in accordance with Section 1604.5;

2. Area of 600 square feet  $(56 \text{ m}^2)$  or less for light frame construction or 400 square feet  $(37 \text{ m}^2)$  or less for other than light frame; and

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3. Eave height of 10 feet (3,048 mm) or less.

Footings shall not bear on frozen soil unless such frozen condition is of a permanent character.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1806 [Repealed, 32 SR 7]

### 1305.1807 SECTION 1807, DAMPPROOFING AND WATERPROOFING.

IBC Section 1807.4.3 is amended to read as follows:

**1807.4.3 Drain discharge.** The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into a trapped area drain, sump, dry well, or other approved location above the ground.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1900 [Repealed, 19 SR 1340]

## 1305.1907 SECTION 1907, DETAILS OF REINFORCEMENT.

IBC Section 1907.7.5 is amended to read as follows:

**1907.7.5 Corrosive environments.** In corrosive environments or other severe exposure conditions, the amount of concrete protection shall be suitably increased, and denseness and nonporosity of protecting concrete shall be considered, or other protection shall be provided. In corrosive environments of parking garages and parking ramps, industrial buildings, or similar environments, a minimum concrete cover of reinforcement steel must be two inches (50.8 mm) for top surfaces and three-quarter inch (19.05 mm) for bottom surfaces. All bonded reinforcement steel located within the depth of the slab must be epoxy coated in conformance with the applicable standards referenced in ACI 318 Sections 3.5.3.7 and 3.5.3.8.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

**History:** 19 SR 1340; 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.1918 [Repealed, 27 SR 1474]

1305.1928 [Repealed, 27 SR 1474]

1305.2000 [Repealed, 19 SR 1340]

1305.2050 [Repealed, 19 SR 1340]

1305.2100 [Repealed, 15 SR 74]

## 1305.2109 SECTION 2109, EMPIRICAL DESIGN OF MASONRY.

IBC Table 2109.4.1 is amended to read as follows:

TABLE 2109.4.1

## WALL LATERAL SUPPORT REQUIREMENTS

#### CONSTRUCTION

MAXIMUM WALL LENGTH TO THICKNESS OR WALL HEIGHT TO THICKNESS

Bearing walls

Solid units or fully grouted	20
All others	18

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Nonbearing walls

Exterior	18
Interior	28

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *19 SR 1340; 27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

1305.2200 [Repealed, 19 SR 1340]

**1305.2300** [Repealed, 19 SR 1340]

1305.2304 [Repealed, 32 SR 7]

## 1305.2308 SECTION 2308, CONVENTIONAL LIGHT-FRAME CONSTRUCTION.

Subpart 1. **IBC Figure 2308.9.3.** The table to IBC Figure 2308.9.3, Basic Components of the Lateral Bracing System, is amended to read as follows:

WIND SPEEDMAXIMUM WALL<br/>SPACING (FEET)REQUIRED BRACKETING LENGTH\*90 mph35'0"Table 2308.9.3(1) and Section 2308.9.3

(IBC Figure 2308.9.3 is changed to reflect amendments in table.)

Subp. 2. **IBC Table 2308.9.3(1).** IBC Table 2308.9.3(1), Braced Wall Panels, is amended to read as follows:

TABLE 2308.9.3(1)

BRACED WALL PANELS<sup>a</sup>

WIND CONDITION CONSTRUCTION METHODS<sup>b,c</sup> BRACED PANEL SPEED LOCATION AND LENGTH<sup>d</sup>

1 2 3 4 5 6 7 8

One story, top X X X X X X X X X X of two or three story

90 mph

Located in accordance with section 2308.9.3 and not more than 25 feet on center

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First story of two X X X X X X X X X story or second story of three story First story of -- X X X X<sup>e</sup> X X X three story

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

<sup>a</sup>This table specifies minimum requirements for braced panels that form interior or exterior braced wall lines.

<sup>b</sup>See Section 2308.9.3 for full description.

<sup>c</sup>See Sections 2308.9.3.1 and 2308.9.3.2 for alternative braced panel requirements.

<sup>d</sup>Building length is the dimension parallel to the braced wall length.

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<sup>e</sup>Gypsum wallboard applied to framing supports that are spaced at 16 inches on center. **Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

1305.2320 [Repealed, 27 SR 1474]

1305.2326 [Renumbered 1305.2320]

1305.2400 [Repealed, 15 SR 74]

1305.2500 [Repealed, 19 SR 1340]

1305.2600 [Repealed, 19 SR 1340]

### 1305.2603 SECTION 2603 FOAM PLASTIC INSULATION.

IBC Section 2603.4.1.13 is amended to read as follows:

**2603.4.1.13 Type V construction.** Foam plastic spray applied to a sill plate and header of Type V construction is subject to all of the following:

1. The maximum thickness of the foam plastic shall be 5-1/2 inches (82.6 mm).

2. The foam plastic shall have a flame spread index of 25 or less and an accompanying smoke-developed index of 450 or less when tested in accordance with ASTM E84.

**Statutory Authority:** *MS s* 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194 **History:** 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**History:** 52 Sit 7, E 2007 C 170 art 75 01, art 15 5 7, E 2007

1305.2700 [Repealed, 19 SR 1340]

### 1305.2702 SECTION 2702, EMERGENCY AND STANDBY POWER SYSTEMS.

IBC Section 2702.1 is amended to read as follows:

**2702.1 Installation.** Emergency and standby power systems shall be installed in accordance with Minnesota Rules, chapter 1315.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

1305.2800 [Repealed, 19 SR 1340]

1305.2900 [Repealed, 19 SR 1340]

### 1305.2902 SECTION 2902, MINIMUM PLUMBING FACILITIES.

Subpart 1. Section 2902.1. IBC Section 2902.1 is amended to read as follows:

**2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3.

**Exception:** When approved by the building official, buildings or structures that are normally unoccupied, such as picnic shelters, amphitheaters, small transit stop stations, cold-storage buildings, utility sheds, warming houses, kiosks, concession stands and similar structures, need not be provided with restroom facilities.

Subp. 1a. Section 2902.1.1. IBC Section 2902.1.1 is amended to read as follows:

**2902.1.1 Unisex toilet and bath fixtures.** Fixtures located within unisex toilet bathing rooms complying with Minnesota Rules, chapter 1341, are permitted to be included in determining the minimum required number of fixtures.

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Subp. 2. Table 2902.1.

A. The body of IBC Table 2902.1 is amended as follows:

1. Add footnote "e" to the A-5 Use Group "Stadiums, amusement parks, bleachers, and grandstands for outdoor sporting events and activities" description of the table.

2. Add footnotes "f," "g," and "h" to the "Drinking Fountains" heading in the table.

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3. Add footnote "i" to the "Water Closets" heading in the table.

B. The footnotes to IBC Table 2902.1 are amended, and footnotes added, to read as follows:

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.

b. Toilet facilities for employees shall be separate from facilities for inmates or patients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient rooms shall be permitted where such room is provided with direct access from each patient room and with provisions for privacy.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

e. Permanent facilities located either on site or available in an adjacent building or portable temporary facilities available on site during times when the stadium or grandstand is in use may be used.

f. A drinking fountain shall not be required in buildings or tenant spaces having an occupant load less than 50.

g. Where water is served in restaurants, drinking fountains shall not be required.

h. Water or other beverages available through free or fee-based serving or dispensers may be substituted for up to 50 percent of the required number of drinking fountains.

i. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets.

Subp. 3. Section 2902.2. IBC Section 2902.2 is amended to read as follows:

**2902.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

### **Exceptions:**

1. Separate facilities shall not be required for dwelling units and sleeping units.

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or less.

3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 or less.

4. Separate facilities shall not be required in Group B occupancies not exceeding 2,000 gross square feet (185.8  $m^2$ ) of floor area. When using this exception, the individual unisex restroom shall have not less than one watercloset, one urinal, and one lavatory.

Subp. 4. Section 2902. IBC Section 2902 is amended by adding a subsection to read as follows:

**2902.6** Controlled access to required facilities. Sanitation facilities required by this chapter may have controlled access, but in all cases shall be maintained available for utilization

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by those employees, customers, or patrons used to calculate the minimum required facilities.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.3000 [Repealed, 15 SR 74]

1305.3001 [Repealed, 27 SR 1474]

### 1305.3030 CHAPTER 30, ELEVATORS AND CONVEYING SYSTEMS.

IBC Chapter 30 is deleted and replaced with the following:

CHAPTER 30

#### ELEVATORS AND CONVEYING SYSTEMS

The design, construction, installation, operation, alteration, and repair of elevators and related devices shall be in accordance with Minnesota Rules, chapter 1307. Refer to Minnesota Rules, chapter 1307, the Minnesota Elevator Code, for the complete application of IBC Chapter 30.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

**1305.3100** [Repealed, 15 SR 74]

### 1305.3109 SECTION 3109, SWIMMING POOL ENCLOSURES.

IBC Section 3109 is deleted.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

1305.3200 [Repealed, 15 SR 74]

1305.3300 [Repealed, 15 SR 74]

### 1305.3302 SECTION 3302, CONSTRUCTION SAFEGUARDS.

IBC Section 3302 is amended by adding a subsection to read as follows:

**3302.3 Construction barriers.** Where construction, remodeling, or demolition is taking place involving the use of cutting and welding, temporary heating with open flames, or flammable liquid fueled equipment, such areas shall be separated from occupied areas of a building by materials that will resist the spread of fire and smoke as specified for draftstopping materials in Section 717.3.1.

Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

History: 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

## 1305.3305 SECTION 3305, SANITARY.

IBC Section 3305 is deleted.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13* **History:** *27 SR 1474; L 2007 c 140 art 4 s 61; art 13 s 4* 

1305.3400 [Repealed, 19 SR 1340]

### 1305.3401 CHAPTER 34, EXISTING STRUCTURES.

IBC Chapter 34 is deleted and replaced with the following:

### CHAPTER 34

### EXISTING STRUCTURES

The standards for a change of occupancy, alteration, and repair of existing buildings and structures with historical significance, shall be in accordance with Minnesota Rules, chapter

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1311. Refer to Minnesota Rules, chapter 1311, the Minnesota Building Conservation Code, for the complete application of provisions for existing structures.

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Statutory Authority: MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194

**History:** 23 SR 683; 27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64

1305.3500 [Repealed, 11 SR 1405]

## 1305.3500 CHAPTER 35, REFERENCED STANDARDS.

IBC Chapter 35 is amended by modifying a referenced standard as follows: NFPA 45 - 2004 Standard on Fire Protection for Laboratories Using Chemicals **Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.101 to 326B.194* **History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* 

1305.3600 [Repealed, 15 SR 74]

1305.3700 [Repealed, 15 SR 74]

1305.3800 [Repealed, 19 SR 1340]

1305.3850 [Repealed, 11 SR 1405]

1305.3860 [Repealed, 19 SR 1340]

1305.3900 [Repealed, 19 SR 1340]

1305.3970 [Repealed, 11 SR 1405]

1305.4000 [Repealed by amendment, 9 SR 1557]

1305.4100 [Repealed, 19 SR 1340]

1305.4200 [Repealed, 15 SR 74]

1305.4300 [Repealed, 11 SR 1405]

1305.4313 [Repealed, 27 SR 1474]

1305.4332 [Repealed, 27 SR 1474]

1305.4415 [Repealed, 27 SR 1474]

1305.4416 [Repealed, 27 SR 1474]

1305.4429 [Repealed, 27 SR 1474]

1305.4500 [Repealed, 15 SR 74]

1305.4600 [Repealed, 19 SR 1340]

**1305.4700** [Repealed, 19 SR 1340]

1305.4800 [Repealed, 19 SR 1340]

1305.4850 [Repealed, 19 SR 1340]

1305.4900 [Repealed, 15 SR 74]

**1305.5000** [Repealed, 11 SR 1405]

1305.5100 [Repealed, 11 SR 1405; 19 SR 1340]

1305.5101 [Renumbered 1307.0010]

1305.5102 [Renumbered 1307.0015]

1305.5103 [Renumbered 1307.0020]

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1305.5104 [Renumbered 1307.0025] 1305.5105 [Renumbered 1307.0030] 1305.5106 [Renumbered 1307.0035] 1305.5107 [Renumbered 1307.0040] 1305.5108 [Renumbered 1307.0045] 1305.5109 [Renumbered 1307.0050] 1305.5110 [Renumbered 1307.0055] 1305.5111 [Renumbered 1307.0060] 1305.5112 [Renumbered 1307.0065] 1305.5114 [Renumbered 1307.0070] 1305.5115 [Renumbered 1307.0075] 1305.5116 [Renumbered 1307.0080] 1305.5117 [Renumbered 1307.0085] 1305.5118 [Renumbered 1307.0090] 1305.5200 [Repealed, 19 SR 1340] 1305.5300 [Repealed, 15 SR 74] 1305.5310 [Repealed, 15 SR 74] 1305.5320 [Repealed, 19 SR 1340] 1305.5340 [Repealed, 19 SR 1340] 1305.5360 [Repealed, 19 SR 1340] 1305.5380 [Repealed, 19 SR 1340] 1305.5385 [Repealed, 19 SR 1340] 1305.5400 [Repealed, 19 SR 1340] 1305.5500 [Repealed, 15 SR 74] 1305.5700 [Repealed, 19 SR 1340] 1305.5710 [Repealed, 19 SR 1340] 1305.5720 [Repealed, 19 SR 1340] 1305.5730 [Repealed, 19 SR 1340] 1305.5740 [Repealed, 19 SR 1340] 1305.5750 [Repealed, 19 SR 1340] 1305.5800 [Repealed, 15 SR 74] 1305.5900 [Repealed, 19 SR 1340] 1305.5910 [Repealed, 11 SR 1405] 1305.6000 [Repealed, 19 SR 1340] 1305.6200 [Repealed, 19 SR 1340] 1305.6250 [Repealed, 19 SR 1340]

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1305.6260 [Repealed, 11 SR 1405]

1305.6270 [Repealed, 11 SR 1405]

1305.6280 [Repealed, 19 SR 1340]

1305.6300 [Repealed, 19 SR 1340]

1305.6400 [Repealed by amendment, 9 SR 1557]

1305.6425 [Repealed, 19 SR 1340]

1305.6430 [Repealed, 19 SR 1340]

1305.6500 [Repealed by amendment, 9 SR 1557]

1305.6525 [Repealed, 19 SR 1340]

1305.6550 [Repealed, 15 SR 74]

1305.6600 [Repealed, 15 SR 74]

1305.6700 [Repealed, 19 SR 1340]

1305.6800 [Repealed, 19 SR 1340]

1305.6900 [Repealed, 15 SR 74]

1305.6901 [Repealed, 19 SR 1340]

1305.6902 [Repealed, 19 SR 1340]

1305.6905 [Repealed, 19 SR 1340]

1305.6910 [Repealed, 19 SR 1340]

1305.6920 [Repealed, 19 SR 1340]

1305.7000 [Repealed, 27 SR 1474]

1305.7100 [Repealed, 27 SR 1474]